Winter **

Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 0544 Upper Roberts Island

Spring

Summer **

Fall

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall	Only)			
	** Non-receipt of Summ Reports may effect or			
† SPRING INSPECTIONS: Overall mainter deficiencies are	nance ratings are not detern e rated using the same crite			ual maintenance
FALL INSPECTIONS: The overall ma within the attac	intenance rating shown abo hed unit inspection reports.			
Comments				

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Left	6.05

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/26/2018 - 4/26/2018			
DWR Inspector	Richard Willoughby			
Accompanied By	Richard Toy KSN			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.00	Rating **	М	Issue No.		66	
LM End	0.00	Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_RD0	544_01_s _ 201	2_66				
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
	-	working knov d in flood trair	0			e. LMA but	

No Photos

Issue No. Rating ** LM Start 0.00 71 Location * 0.00 Issue Type + Ма N/A LM End GPS Latitude/Longitude Earthen Levee Category Operations & Maintenance Item Manuals DWR ID DWR_RD0544_01_s _ 2013_71 Comment Code

No Photos

Inspector Comment

The LMA has a copy of O&M manual on file in the office.

LM Start	0.00	Rating **	Α	Issue No.		72		
LM End	0.00	Issue Type +	Ma	Location *	N/A			
Category Earthen Levee			GPS La	atitud	le/Longitude			
				Start		End	.nd	
Emergency Supplies &				0		0		
пеш	Equipmer	nt			0		0	
DWR ID	DWR_RD0	544_01_s _ 201	3_72					
		Comn	nent Cod	le				
	Inspector Comment							
The LMA r	naintains a	an adequate s	upply of	floodfight n	nate	rial.		

	* Location	** Rating		+ Issue Type
	LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
-	WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
	CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.00	Rating **	M	Issue No.		52		
LM End	6.05	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		37.8704	22 °	37.808701 °		
пеш					58°	-121.328317°		
DWR ID	DWR ID DWR_RD0544_01_s _ 2018_52							
		Comn	nent Cod	le				
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	oes a	and		
easements	S.							
		Inspecto	or Comm	nent				

No Photos

LM Start	0.00	Rating **	М	Issue No.		53		
LM End	6.05	Issue Type +	Ма	Location *		WS		
Category	Cotogon				e/Longitude			
Category				Start		End		
Item	Vegetatio	n		37.870422°		37.808701 °		
пеш				-121.3298	57°	-121.328317 °		
DWR ID	DWR ID DWR_RD0544_01_s _ 2018_53							
Comment Code								
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slop	oes a	and		

No Photos

Inspector Comment

easements.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.01	Rating **	М	Issue No.		152		
LM End	0.01	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End		
Item	DWR UCI	IP Field Study		37.8703	56°	37.870356°		
пеш				-121.3298	52 °	-121.329852 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:41906 DS_ID:22640 EP_NO: 4116

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status.- a signboard on waterside shoulder and across the river.- no indicators on landside.

FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levees and under the river, 3.9 feet below the crown. Waterside (WS) slope rock revetted. (Plans for installation of an 8.625-inch gas line under the San Joaquin River and through the levees authorized under Permit No. 4116, 1962 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.01)].

FS Date: 10/29/2013

LM Start	0.01	Rating **	М	Issue No.	152 (cont)
LM End	0.01	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_SP_2018_41906_41713.jpg

WS view: a signboard indicating a gasline on levee shoulder.

Photo 2 of 3: UCIP_SP_2018_41906_41712.jpg



WS view: a signboard indicating a gasline across the river channel.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.01	Rating **	М	Issue No.		152 (cont)
LM End	0.01	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		37.87035	6 °	37.870356°
пеш				-121.32985	2°	-121.329852 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:41906 DS_ID:22640 EP_NO: 4116

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status.- a signboard on waterside shoulder and across the river.- no indicators on landside.

FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levees and under the river, 3.9 feet below the crown. Waterside (WS) slope rock revetted. (Plans for installation of an 8.625-inch gas line under the San Joaquin River and through the levees authorized under Permit No. 4116, 1962 - Pacific Gas and Electric Company

[PG&E]). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.01)].

FS Date: 10/29/2013



WS view: closer view of a signboard indicating a gasline on levee shoulder.

LM Start	0.01	Rating **	М	Issue No.		153
LM End	0.01	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Category			Start		End	
Item	DWR UC	IP Field Study		37.87029	96°	37.870296°
пеш				-121.32982	26°	-121.329826 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:23851 DS_ID:24713 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. May need proper

abandonment.Pipe exposed on landside slope.

FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Appears abandoned. Only visible on the landside (LS) slope. No pipe or other

features visible on the waterside (WS).

FS Date: 10/29/2013



LS view: exposed 12-inch steel pipe on levee slope. Appears abandoned.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.01	Rating **	М	Issue No.		153 (cont)	
LM End	0.01	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.8702	96°	37.870296	0
пеш				-121.3298	26 °	-121.329826	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:23851 DS_ID:24713 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. May need proper

abandonment.Pipe exposed on landside slope.

FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Appears abandoned. Only visible on the landside (LS) slope. No pipe or other features visible on the waterside (WS).

FS Date: 10/29/2013

LM Start	0.01	Rating **	М	Issue No.	153 (cont)
LM End	0.01	Issue Type +	En	Location *	



LS view: a 12-inch steel pipe on levee slope. Holes on the pipe, appears abandoned.

Photo 3 of 3: UCIP_SP_2018_23851_41726.jpg



WS view: no pipe and appurtenances found on waterside.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.01	Rating **	М	Issue No.		92		
LM End	0.01	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.8702	85 °	37.870285 °		
пеш				-121.3298	22 °	-121.329822 °		
DWR ID	DWR ID DWR_RD0544_01_f _ 2014_92							
		Comn	nent Cod	le				
T1: Trim t	rees to at l	east five feet	above g	round level.				
		Inspecto	or Comm	nent				
Untrimmed tree on landside slope.								



Looking southwest at untrimmed tree on landward slope.

LM Start	0.06	Rating **	М	Issue No.		4	
LM End	0.19	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroach	ments		37.8696	06°	37.868163	0
пеш				-121.3295	71 °	-121.328132	0
DWR ID	DWR_RD0	544_01_s _ 201	2_4				

Comment Code

EQ : Equipment

Inspector Comment

Farm equipment and supplies stored at landside toe.

LM Start	0.06	Rating **	М	Issue No.	4 (cont)
LM End	0.19	Issue Type +	En	Location *	LS

Photo 1 of 5 : SP_2018_RD0544_108_4_20180323_00005.jpg



Looking west at equipment stored at landward toe fall 2015

Photo 2 of 5 : SP_2018_RD0544_108_4_20180323_00006.jpg



Looking southwest at equipment stored at landward toe fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.06	Rating **	М	Issue No.		4 (cont)	
LM End	0.19	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	atituc	le/Longitude	
Calegory						End	
Item	Encroachments			37.8696	06°	37.868163 °	
item				-121.3295	71 °	-121.328132 °	
DWR ID DWR_RD0544_01_s _ 2012_4							
		Comn	nent Cod	de			
EQ : Equip	ment						
			_				
		Inspecto	or Comm	nent			
Farm equipment and supplies stored at landside toe.							

LM Start	0.06	Rating **	М	Issue No.	4 (cont)
LM End	0.19	Issue Type +	En	Location *	LS

Photo 3 of 5 : SP_2018_RD0544_108_4_20180323_00007.jpg

Looking south at farm equipment at landward toe. (Spring 2015)

Photo 4 of 5 : SP_2018_RD0544_108_4_20180323_00008.jpg



Looking north at equipment along landside toe.

Photo 5 of 5: SP_2018_RD0544_108_4_20180323_00009.jpg

LM Start	0.06	Rating **	М	Issue No.	4 (cont)
LM End	0.19	Issue Type +	En	Location *	LS



Looking south at equipment along landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.06	Rating **	U	Issue No.		118	
LM End	0.06	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
ltom	Item Erosion / Bank Caving			37.869570°		37.869570°	
пеш				-121.329556 °		-121.329556 °	
DWR ID	DWR_RD0	544_01_f _ 201	5_118				
Comment Code							
E2 : Schedule repair of erosion site prior to the next inspection.							

Inspector Comment

Finger erosion noted on landside slope.



Looking west at landside erosion for shoulder to middle of levee slope.

LM Start	0.26	Rating **	М	Issue No.		101	
LM End	0.34	Issue Type +	Ма	Location *		CR	
Category	Earthen L	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End		
Item		rface / Depres	ssions /	37.86714	8°	37.866036 °	
пеш	Rutting			-121.32779)7 °	-121.327862 °	
DWR ID	DWR_RD0	544_01_s _ 201	6_101				

Comment Code

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

No Photos

LM Start	0.26	Rating **	М	Issue No.	85			
LM End	0.36	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category			Start		End			
Item	Encroach	ments	ents		87°	37.865668°		
пеш			-121.327802 °		-121.327798 °			
DWR ID	DWR_RD0	544_01_s _ 201	5_85					
		Comn	nent Cod	le				
DT : Ditch								
Inspector Comment								

Irrigation ditch at landside toe.

Photo 1 of 1: SP_2018_RD0544_108_85_20180323_00062.jpg

Looking southwest at Irrigation ditch at landward toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.38	Rating **	М	Issue No.		154	
LM End	0.38	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.8654	68°	37.865468	٥
пеш				-121.3276	02 °	-121.327602	٥
DWR ID							

Comment Code

Inspector Comment

FS_ID:41974 DS_ID:22643 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Dense vegetation on waterside.

FIELD_STRUCT_DESC: *ABANDONED* Pipe of an unknown size, material, or purpose through the levee, approximately 8 feet below the crown. Plugged by USACE in 1962. [Additional Reference(s): DWR

Levee Log, 2005]. FS Date: 10/29/2013

	Photo 1 of 1 : SP	2018 RD0544 108	_2_20180323_00002.jpg
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No Photos



Looking southwest at untrimmed tree on landward slope.

LM Start	0.42	Rating **	A/W	Issue No.		2	
LM End	0.42	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory						End	
Item	Trim / Thi	n Trees		37.8649	58°	37.864958 °	
пеш				-121.3271	42 °	-121.327142 °	
DWR ID	DWR_RD0	544_01_s _ 201	2_2				
Comment Code							
T2 : Thin to	rees to allo	w visibility of	the grou	nd and roor	n to	flood fight.	
		Inspecto	or Comm	nent			
Large untri	immed tree	e on landside	slope.				

* Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	
CR : Crown	

* Rating

A : Acceptable

M : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.45	Rating **	М	Issue No.		1	
LM End	0.45	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory						End	
Item	Encroach		37.864713 °		37.864713°		
пеш					'08 °	-121.326708°	
DWR ID DWR_RD0544_01_f _ 2013_1							
Comment Code							
MA : Mate	rial						
		Inspecto	or Comm	nent			
Old broker	concrete	pipes on water	erside be	rm.			

Photo 1 of 1: SP_2018_RD0544_108_1_20180323_00001.jpg

Looking northeast at broken concrete piping on waterward berm.

LM Start	0.45	Rating **	С	Issue No.		6
LM End	0.45	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		37.8647	13°	37.864713 °
пеш				-121.3267	08 °	-121.326708 °
DWR ID	DWR_RD0	544_01_f _ 201	3_6			

Comment Code

PR : Prunings

Inspector Comment

Broken tree limbs on waterside slope and berm.

No Photos

LM Start	0.48	Rating **	U	Issue No.		3	
LM End	0.67	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		37.86457	'8°	37.863753	0
Item				-121.32621	0 °	-121.322835	0
DWR ID	DWR_RD0	544_01_s _ 201	2_3				

Comment Code

 $\ensuremath{\mathsf{V2}}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Dense vegetation on waterside and landside slopes.



Looking southeast at the waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.48	Rating **	U	Issue No.		3 (cont)		
LM End	0.67	Issue Type +	Ma	Location *	WS			
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End			
Item	Vegetatio	n		37.8645	78°	37.863753 °		
пеш						-121.322835 °		
DWR ID DWR_RD0544_01_s _ 2012_3								
	Comment Code							
V2 : Remo	V2 : Remove the wild growth other than native grasses from the levee slopes.							
		Inspecto	or Comm	nent				

Dense vegetation on waterside and landside slopes.



Looking south at dense veg on waterward slope.

LM End 0.63 Issue Type + Ma Location * Earthen Levee GPS Latitude/L	CR Longitude		
	ongitude		
Category	GPS Latitude/Longitude		
Start	End		
Crown Surface / Depressions / 37.864359 °	37.864011°		
Rutting -121.324939 ° -	-121.323562 °		
DWR ID DWR_RD0544_01_f _ 2013_61			

Comment Code

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.64	Rating **	A/W	Issue No.		75	
LM End	0.64	Issue Type +	Ма	Location *			
Category	ental	GPS Lat	itud	e/Longitude			
Calegory		Start		End			
Item	2017 Stor	m Damage	37.86390	0 °	37.863900 °		
Item			-121.32350	0 °	-121.323400 °		
DWR ID DWR_RD0544_01_f _ 2017_75							

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:571

Site Designation:LMA-477

Repair Type: Erosion

Rating:Area of Concern Field Date:8/10/2017

Notes:

LM Start	0.64	Rating **	A/W	Issue No.	75 (cont)
LM End	0.64	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_571_4480.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.64	Rating **	A/W	Issue No.	75 (cont)			
LM End	0.64	Issue Type +	Ма	Location *				
Supplemental				GPS La	titud	le/Longitude		
Calegory	Category					End		
Item	2017 Stor	m Damage		37.86390	0°	37.863900 °		
пеш		-121.32350	0°	-121.323400 °				
DWR ID DWR_RD0544_01_f _ 2017_75								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:571

Site Designation:LMA-477

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:



LM Start	0.64	Rating **	С	Issue No.		86			
LM End	0.64	Issue Type +	Ma	Location *		WS			
Category Earthen Levee				GPS Latitude/Longitude					
Calegory	Category					End			
Item	Encroachments			37.8639	72 °	37.863972 °			
пеш			-121.3234	43 °	-121.323443 °				
DWR ID	DWR ID DWR_RD0544_01_s _ 2015_86								
Comment Code									
CA · Carb	GA : Carbago								

GA : Garbage

Inspector Comment

Old "dead end" sign on waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.64	Rating **	U	Issue No.	9				
LM End	0.70	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Vegetatio	n		37.8639	35°	37.863599°			
пеш				-121.3233	41 °	-121.322442 °			
DWR ID	DWR ID DWR_RD0544_01_s _ 2012_9								
		Comn	nent Cod	le					
V6 : Lands	caping								
		Inspecto	or Comm	nent					

Issue No.

Location *

9 (cont)

LS

Rating **

Issue Type +

0.64

0.70

LM Start

LM End



Looking southwest at dense landscaping on landward slope fall 2015

Photo

Photo 2 of 2: SP_2018_RD0544_108_9_20180323_00016.jpg



Looking south at landscaping on landward slope.

LM Start	0.70	Rating **	U	Issue No.		10		
LM End	0.70	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		37.8635	75 °	37.863575		
пеш				-121.3223	67 °	-121.322367		
DWR ID DWR_RD0544_01_s _ 2012_10								
		Comn	nent Cod	de				
V6 : Lands	scaping							
			_					
		Inspecto	or Comm	nent				
Oleander on waterside slope.								



Looking south at dense oleanders on waterward slope fall 2015.

*Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
C: Corrected
C: Corrected
C: Corrected
D: Unacceptable
AW: Acceptable but Monitor & Maintain

** Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.78	Rating **	М	Issue No.		73			
LM End	0.78	Issue Type +	Ма	Location *	WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Trim / Thi	n Trees		37.8630	16°	37.863016 °			
пеш				-121.3211	37°	-121.321137 °			
DWR ID DWR_RD0544_01_f _ 2013_73									
		Comn	nent Cod	le					
T1: Trim t	rees to at l	east five feet	above g	round level.					
	Inspector Comment								

No Photos

LM Start	0.81	Rating **	A/W	Issue No.		93
LM End	0.81	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS La	le/Longitude		
			Start		End	
Trim / Thin Trees			37.862694°		37.862694°	
пеш				-121.3208	87°	-121.320887 °
DWR ID	DWR_RD0	544_01_f _ 201	4_93			
Comment Code						
T1 : Trim trees to at least five feet above ground level.						

Inspector Comment



Looking west at untrimmed trees on landward slope and toe fall 2015.

* Rating
A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.99	Rating **	A/W	Issue No.		77
LM End	1.02	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
			Start		End	
Item	2017 Stor	m Damage		37.86040	00°	37.860200°
пеш				-121.32030	00°	-121.319700 °
DWR ID	DWR ID DWR_RD0544_01_f _ 2017_77					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:570

Site Designation:LMA-476

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:

LM Start	0.99	Rating **	A/W	Issue No.	77 (cont)
LM End	1.02	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_570_4598.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.99	Rating **	A/W	Issue No.		77 (cont)
LM End	1.02	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
			Start		End	
Item	2017 Stor	m Damage		37.86040	00°	37.860200°
пеш				-121.32030	00°	-121.319700 °
DWR ID DWR_RD0544_01_f _ 2017_77						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:570

Site Designation:LMA-476

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:



LM Start	1.12	Rating **	A/W	Issue No.		39
LM End	1.12	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Trim / Thin Trees			37.8594	23 °	37.859423 °
пеш				-121.3183	28 °	-121.318328°
DWR ID	D DWR_RD0544_01_s _ 2012_39					
Comment Code						
T1 · Trim trees to at least five feet above ground level						

. .

Inspector Comment

Untrimmed trees on landside slope.

Photo 1 of 2: SP_2018_RD0544_108_39_20180323_00033.jpg



Looking southwest at landside slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.12	Rating **	A/W	Issue No.		39 (cont)
LM End	1.12	Issue Type +	Ма	Location *		LS
Cotogon Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item	Trim / Thin Trees			37.859423 °		37.859423 °
item			-121.31832	28°	-121.318328 °	
DWR ID	DWR_RD0	544_01_s _ 201	2_39			
		Comn	nent Cod	le		
T1: Trim t	rees to at I	east five feet	above g	round level.		
Inspector Comment						
Untrimmed trees on landside slope.						



Looking southwest at untrimmed tree on landward slope.

LM Start	1.19	Rating **	U	Issue No.		12
LM End	1.19	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS La	titud	e/Longitude	
Calegory				Start		End
Item	Vegetatio	n		37.85848	89°	37.858489°
пеш				-121.31874	ı3°	-121.318743 °
DWR ID	DWR_RD0544_01_s _ 2018_12					

Comment Code

V4 : Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

LM Start	1.29	Rating **	A/W	Issue No.		89	
LM End	1.29	Issue Type +	Ma	Location *		LS	
Catagoni Earthen Levee				GPS La	titud	e/Longitude	
Category			Start		End		
Item	Trim / Thin Trees			37.8573	21 °	37.857321	0
пеш				-121.3199	43 °	-121.319943	0
DWR ID	DWR_RD0						
Comment Code							

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



Looking southwest at dense veg on landward slope and toe.

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.44	Rating **	N	Issue No.		14
LM End	1.44	Issue Type +	Ma	Location *		WS
Earthen Levee				GPS La	atitud	e/Longitude
Category				Start		End
Item	Trim / Thin Trees			37.8555	83 °	37.855583 °
пеш				-121.3211	77 °	-121.321177 °
DWR ID	DWR_RD0	544_01_s _ 201	2_14			
		Comn	nent Cod	le		
T5 : Tree s	stumps.					
		Inspecto	or Comm	nent		

No Photos

LM Start	1.46	Rating **	A/W	Issue No.		87
LM End	1.48	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		37.8554	16°	37.855043°
item				-121.3211	71 °	-121.321122 °
DWR ID	DWR_RD0	544_01_s _ 201	5_87			·

Comment Code

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



Photo 1 of 1: SP_2018_RD0544_108_87_20180323_00064.jpg



Looking west at untrimmed tree at landward toe fall 2015.

LM Start	1.50	Rating **	U	Issue No.		119	
LM End	1.51	Issue Type +	Ma	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory	Jalegory			Start		End	
Item	Slope Sta	bility		37.8548	44 °	37.854564°	
пеш			-121.3210	90°	-121.321031 °		
DWR ID DWR_RD0544_01_f _ 2015_119							

Comment Code

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Damaged levee slope due to fishermen using slope as a ramp.



Looking southeast at damaged waterward slope fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.50	Rating **	U	Issue No.		119 (cont)			
LM End	1.51	Issue Type +	Ма	Location *	WS				
Category	evee	GPS Latitude/Longitude							
Calegory				Start		End			
Item	Slope Sta	bility		37.85484	4 °	37.854564°			
пеш			-121.32109	0 °	-121.321031 °				
DWR ID DWR_RD0544_01_f _ 2015_119									
	Comment Code								

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Damaged levee slope due to fishermen using slope as a ramp.

LM Start	1.50	Rating **	U	Issue No.	119 (cont)
LM End	1.51	Issue Type +	Ma	Location *	WS

Photo 2 of 3: SP_2018_RD0544_108_119_20180323_00090.jpg



Looking east at damaged waterward slope fall 2015.

Photo 3 of 3: SP_2018_RD0544_108_119_20180323_00091.jpg



Looking southeast at damaged waterward slope fall 2015

Photo 1 of 1: SP_2018_RD0544_108_43_20180323_00036.jpg

LM Start	1.57	Rating **	U	Issue No.		43			
LM End	1.76	Issue Type +	Ма	Location *		WS			
Category	evee	GPS Latitude/Longitude							
Calegory	Calegory					End			
Item	Vegetatio	n		37.85410)8°	37.853980°			
item				-121.321582 °		-121.324213 °			
DWR ID DWR_RD0544_01_s _ 2012_43									
	Comment Code								

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Dense vegetation waterside slope.



Looking east at dense veg on waterward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.59	Rating **	A/W	Issue No.		95
LM End	1.59	Issue Type +	Ma	Location *	LS	
Earthen Levee				GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	Trim / Thi	n Trees		37.85429	9°	37.854299°
item				-121.32186	55°	-121.321865 °
DWR ID DWR_RD0544_01_s _ 2018_95						
		Comp	ant Coo	lo.		

Comment Code T1: Trim trees to at least five feet above ground level.

Inspector Comment

Untrimmed tree on landside slope.





Looking southwest at untrimmed tree on landward slope.

LM Start	1.63	Rating **	М	Issue No.		79	
LM End	1.63	Issue Type +	Ma	Location *	WS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Encroach	Encroachments			98°	37.854598	0
пеш		-121.3223	20°	-121.322320	0		
DWR ID	DWR_RD0544_01_s _ 2017_79						

Comment Code

GA: Garbage

Inspector Comment

Remove abandoned stairs to boat dock.



Looking southeast at abandoned wooden boat dock stairs on waterward

LM Start	1.63 Rating ** U		Issue No.		146	
LM End	1.63	Issue Type +	Ма	Location * LS		LS
Category	Earthen Levee			GPS La	le/Longitude	
Category			Start		End	
Item	Animal Co	Animal Control			43 °	37.854643°
пеш				-121.3224	29°	-121.322429 °
DWR ID	DWR_RD0544_01_f _ 2017_146					

Comment Code A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Large rodent hole on landside slope.

Photo 1 of 1: SP_2018_RD0544_108_146_20180323_00136.jpg



Looking east at the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.64	Rating **	A/W	Issue No.	145			
LM End	1.64	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category		Start		End				
Trim / Thin Trees			37.8546	73°	37.854673°			
пеш	nem			-121.322492 °		-121.322492 °		
DWR ID	DWR ID DWR_RD0544_01_f _ 2017_145							
		Comn	nent Cod	le				
T1: Trim t	rees to at l	east five feet	above g	round level				
		Inspecto	or Comm	nent				



Looking northwest at the landside slope.

LM Start	1.67	Rating **	A/W	Issue No.	78		
LM End	1.70	Issue Type +	Ob	Location *			
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	2017 Storm Damage			37.85492	° 02	37.854850 °	
пеш				-121.32304	° Ol	-121.323770 °	
DWR ID	DWR_RD0	7_78					
Comment Code							

Inspector Comment

Levee Evaluation Comments Description: Site ID No:93

Site Designation:189-109 Repair Type: Seepage

Rating: Field Date: Notes:

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.72	Rating **	М	Issue No.		155
LM End	1.72	Issue Type +	En	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		37.85450	3°	37.854506°
пеш					3°	-121.323886 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51351 DS_ID:22648 EP_NO: 4114

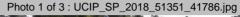
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: No signs of erosion or depressions found on either levee slope. Slope may have been backfilled but cause of original depression (likely a pipe integrity problem) may not have been addressed. Walkway still in poor structural condition. Downgraded this crossing from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:-levee depression on both sides of the levee.- 2-inch electric conduit on waterside and service pole on landside.Walkway in poor structural condition. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 18-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure pier in the river. Siphon breaker on the apex of the pipe on the landside (LS) slope. Concrete standpipe at the LS toe. 2-inch electrical conduit through the levee. Service pole at the LS toe. (Plans to install a pump, pump structure, and one 20-inch pipeline through the levee authorized under Permit No. 4114, 1962 - Katie M. Feck). [Additional Reference(s): DWR Levee Log, 2005, 14-inch pipe referenced, 4.2 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.73), 20-inch pipe, 4.2 feet below the crown, referenced].

FS Date: 12/22/2016

LM Start	1.72	Rating **	M	Issue No.	155 (cont)
LM End	1.72	Issue Type +	Fn	Location *	





WS view: pipe, conduit, walkway, and pump on levee slope.

Photo 2 of 3: UCIP_SP_2018_51351_41785.jpg



WS view: pump on wooden pile structure in the stream.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.72	Rating **	М	Issue No.		155 (cont)
LM End	1.72	Issue Type +	En	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		37.85450	6°	37.854506 °
item		-121.32388	6 °	-121.323886 °		
DWR ID						

Comment Code

Inspector Comment

FS_ID:51351 DS_ID:22648 EP_NO: 4114

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: No signs of erosion or depressions found on either levee slope. Slope may have been backfilled but cause of original depression (likely a pipe integrity problem) may not have been addressed. Walkway still in poor structural condition. Downgraded this crossing from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:-levee depression on both sides of the levee.- 2-inch electric conduit on waterside and service pole on landside.Walkway in poor structural condition. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 18-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure pier in the river. Siphon breaker on the apex of the pipe on the landside (LS) slope. Concrete standpipe at the LS toe. 2-inch electrical conduit through the levee. Service pole at the LS toe. (Plans to install a pump, pump structure, and one 20-inch pipeline through the levee authorized under Permit No. 4114, 1962 - Katie M. Feck). [Additional Reference(s): DWR Levee Log, 2005, 14-inch pipe referenced, 4.2 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.73), 20-inch pipe, 4.2 feet below the crown, referenced].

Photo 3 of 3: UCIP_SP_2018_51351_41784.jpg



WS view: depression on levee shoulder near walkway. Half of the walkway stripped off.

LM Start	1.78	Rating **	A/W	Issue No.		88		
LM End	1.78	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS La	titud	le/Longitude		
Calegory		Start		End				
Item	Trim / Thi	n Trees		37.8537	70°	37.853770	0	
пеш				-121.3242	93 °	-121.324293	0	
DWR ID	DWR_RD0	544_01_s _ 201	5_88					
Comment Code								

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.82	Rating **	U	Issue No.		80	
LM End	1.82	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Itom	Erosion /	Bank Caving		37.85317	'3	37.853173°	
Item				-121.324145 °		-121.324145 °	
DWR ID	R ID DWR_RD0544_01_s _ 2017_80						
		Comn	nent Coc	le			

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Repair slope damage due to water runoff.

LM Start	1.82	Rating **	U	Issue No.	80 (cont)
LM End	1.82	Issue Type +	Ma	Location *	LS

Photo 1 of 2: SP_2018_RD0544_108_80_20180323_00058.jpg



Looking west at slope damage due to rain runoff on waterward slope.

Photo 2 of 2: SP_2018_RD0544_108_80_20180323_00059.jpg



Looking south at slope damage due to rain runoff on waterward slope.

LNA Otrait	1.84	Rating **	U	Issue No.		64	
LM Start	1.04	Rating	U	issue ivo.	04		
LM End	1.93	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Odlogory				Start		End	
Item	Encroach	ments		37.8529	71 °	37.851746°	
item				-121.324096 °		-121.323328°	
DWR ID	DWR_RD0	544_01_f _ 201	5_64				
		Comn	nent Coo	le			
GA : Garba	age						
	Inspector Comment						

Plastic sheeting and rubber tires stored at landward toe.





Looking southwest at rubber tires stored along landward toe. (Spring 2018)

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.84	Rating **	U	Issue No.		64 (cont)	
LM End	1.93	Issue Type +	En	Location *		LS	
Cotagon Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	Category			Start		End	
Item	Encroachments			37.852971 °		37.851746°	
item				-121.324096 °		-121.323328 °	
DWR ID	DWR_RD0	544_01_f _ 201	5_64				
Comment Code							
GA : Garba	age						

Inspector Comment

Plastic sheeting and rubber tires stored at landward toe.



Photo 2 of 3 : SP_2018_RD0544_108_64_20180323_00047.jpg



Looking southwest at rubber tires stored at landward toe.

Photo 3 of 3: SP_2018_RD0544_108_64_20180323_00046.jpg



Looking west at plastic sheeting stored at landward toe.

11101	4.00	Rating **	М	Issue No.		04	
LM Start	1.88	Rating	IVI	issue ivo.		81	
LM End	1.88	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Animal Co	ontrol		37.8523	27°	37.852327	0
item				-121.323767 °		-121.323767	0
DWR ID	DWR_RD0	544_01_f _ 201	7_81				
		Comn	nent Cod	le			
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	nent			
Active rode	ents on lev	ree.					

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.89	Rating **	A/W	Issue No.	127		
LM End	1.91	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Itom	2017 Stor	m Damage		37.85230	00°	37.852000°	
пеш	Item			-121.32370	00°	-121.323600°	
DWR ID	DWR_RD0	R_RD0544_01_f _ 2017_127					
		Comn	nent Coo	de			

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:569

Site Designation:LMA-475

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:

LM Start	1.89	Rating **	A/W	Issue No.	127 (cont)
LM End	1.91	Issue Type +	Ma	Location *	

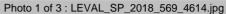




Photo 2 of 3: LEVAL_SP_2018_569_4615.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.89	Rating **	A/W	Issue No.		127 (cont)	
LM End	1.91	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory	Calegory			Start		End	
Item	2017 Stor	m Damage		37.8523	00°	37.852000 °	
пеш				-121.3237	° 00	-121.323600 °	
DWR ID DWR_RD0544_01_f _ 2017_127						·	
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:569

Site Designation:LMA-475

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:



LM Start	2.16	Rating **	С	Issue No.		148			
LM End	2.16	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	GPS Latitude/Longitude				
Category			Start End		End				
Item	Encroach	ments		37.849467 °		37.849467°		37.849467	0
пеш				-121.324534 °		° -121.324534			
DWR ID	DWR_RD0	544_01_f _ 201	7_148						
		Comn	nent Cod	le					
GA : Garba	age								
		Inspecto	or Comm	nent					
Trash on la	andside slo	ope.							

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.25	Rating **	М	Issue No.		82		
LM End	2.25	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Category				Start		End		
Item	Encroachments			37.8483	02°	37.848302 °		
пеш				-121.3248	-121.324877 °			
DWR ID DWR_RD0544_01_s _ 2017_82								
		Comn	nent Coo	de				
EQ : Equip	ment							
	Inspector Comment							
Old irrigation pipe.								



Looking southwest at old irriagtion pipe on landward shoulder.

LM Start	2.25	Rating **	U	Issue No.		156
LM End	2.25	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Lon			e/Longitude
Calegory						End
Itom	DWR UC	IP Field Study	37.8482	25 °	37.848225 °	
Item		-121.3248	68 °	-121.324868 °		
DWR ID						

Comment Code

Inspector Comment

FS_ID:51352 DS ID:22650 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Erosion of LS slope along pipe alignment. (K. Fazel - UCIP)10/29/2013: Siphon breaker on the landward slope not found. It has been removed and pipe plugged. Huge levee slope erosion on landside. 2-inch electric conduit on waterside, service pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 14-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump on a pile structure in the river. Steel walkway to the pump. 2-inch electrical conduit through the levee to the waterside (WS). Power pole on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005, pipe referenced as 5 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.26), pipe referenced as 5 feet below the crown]. FS Date: 12/22/2016

Photo 1 of 3: UCIP_SP_2018_51352_42007.jpg



WS view: steel pipe, walkway to the pump, conduit (bottom left) on levee

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.25	Rating **	U	Issue No.		156 (cont)		
LM End	2.25	Issue Type +	En	Location *				
Category	Suppleme	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.84822	5°	37.848225 °		
пеш				-121.32486	3°	-121.324868 °		
DWR ID								

Comment Code

Inspector Comment

FS ID:51352 DS_ID:22650 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Erosion of LS slope along pipe alignment. (K. Fazel - UCIP)10/29/2013: Siphon breaker on the landward slope not found. It has been removed and pipe plugged. Huge levee slope erosion on landside. 2-inch electric conduit on waterside, service pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 14-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump on a pile structure in the river. Steel walkway to the pump. 2-inch electrical conduit through the levee to the waterside (WS). Power pole on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005, pipe referenced as 5 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.26), pipe referenced as 5 feet below the crown]. FS Date: 12/22/2016

LM Start	2.25	Rating **	U	Issue No.	156 (cont)
LM End	2.25	Issue Type +	En	Location *	

Photo 2 of 3: UCIP_SP_2018_51352_42006.jpg



WS view: steel pipe, walkway to the pump, and pump on steel pile structure in the stream.

Photo 3 of 3: UCIP_SP_2018_51352_42005.jpg



LS view: exposed pipe, concrete standpipe (left), service pole (top right) and eroded slope.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.26	Rating **	U	Issue No.		23	
LM End	2.26	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Erosion /	Bank Caving		37.8481	55°	37.848155°	
item				-121.3248	97 °	-121.324897 °	
DWR ID	DWR_RD0	544_01_s _ 201	2_23				
		Comn	nent Cod	le			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.	
Inspector Comment							
Caving/erosion around irrigation pipe on landside slope.							

hoto 1 d	of 3 : SP ₋	_2018_RD	0544_1	08_23_	_20180323_	_00024.	.jpg
- 1				X 10.			
					19		
			AND O		1.161		
					122		
	1 2						
			4				
7					为。特		

Looking south at erosion around irriagation pipe on landside slope. (Fall 2014)

 LM Start
 2.26
 Rating **
 U
 Issue No.
 23 (cont)

 LM End
 2.26
 Issue Type +
 Ma
 Location *
 LS

Photo 2 of 3: SP_2018_RD0544_108_23_20180323_00025.jpg



Looking north at erosion under irrigation pipe on landside slope.

LM Start	2.26	Rating **	U	Issue No.	23 (cont)
LM End	2.26	Issue Type +	Ma	Location *	LS



Looking east at erosion under irrigation pipe on landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.26	Rating **	U	Issue No.		157		
LM End	2.26	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.84802	e e	37.848029		
пеш				-121.32485 ⁻	ı°	-121.324851		
DWR ID								

Comment Code

Inspector Comment

FS_ID:51349 DS_ID:22652 EP_NO: 13554 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016:Depression (hole) in levee in two places on the WS slope in alignment with this pipe. One of the holes is due to rodent activity. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/29/2013:- levee slope erosion on landside.- needs cleaning of siphon breaker. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch coated steel drainage discharge pipe, 2 feet below the crown. Pump in a concrete standpipe in a drainage ditch at the landside (LS) toe. Siphon breaker in a steel riser on the waterside (WS). (Plans to install a 12-inch discharge pipe through the levee for removal of excess waters authorized under Permit No. 13554, 1982 - Lloyd Phelps Jr). [Additional Reference(s): DWR Levee Log, 2005, states that the pump is on a pier in the channel].

LM Start	2.26	Rating **	U	Issue No.	157 (cont)
LM End	2.26	Issue Type +	En	Location *	



WS view: steel pipe immersed into the stream.

Photo 2 of 3: UCIP_SP_2018_51349_44829.jpg



WS view: siphon breaker inside steel pipe riser (bottom) on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.26	Rating **	U	Issue No.		157 (cont)
LM End	2.26	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	IP Field Study		37.8480	29°	37.848029 °
пеш				-121.3248	51 °	-121.324851 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51349 DS_ID:22652 EP_NO: 13554 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016:Depression (hole) in levee in two places on the WS slope in alignment with this pipe. One of the holes is due to rodent activity. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/29/2013:- levee slope erosion on landside.- needs cleaning of siphon breaker. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch coated steel drainage discharge pipe, 2 feet below the crown. Pump in a concrete standpipe in a drainage ditch at the landside (LS) toe. Siphon breaker in a steel riser on the waterside (WS). (Plans to install a 12-inch discharge pipe through the levee for removal of excess waters authorized under Permit No. 13554, 1982 - Lloyd Phelps Jr). [Additional Reference(s): DWR Levee Log, 2005, states that the pump is on a pier in the channel].



WS view: siphon breaker inside steel pipe riser on levee slope. Needs dirt cleaning/clearing.

LM Start	2.26	Rating **	A/W	Issue No.	98		
LM End	2.31	Issue Type +	Ma	Location *		LS	
Category	evee	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.8480	21 °	37.847343 °	
пеш				-121.3248	39°	-121.324672 °	
DWR ID	R ID DWR_RD0544_01_f _ 2014_98						
	Comment Code						

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

Untrimmed trees on landside slope.

Photo 1 of 1 : SP_2018_RD0544_108_98_20180323_00073.jpg



Looking south at untrimmed trees on landward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	art 2.27	Rating **	U	Issue No.		8	
LM End	d 2.33	Issue Type +	Ma	Location *		LS	
Category	Earthen L	.evee		GPS La	atitud	le/Longitude	
Calegory	ı y			Start		End	
Item	Animal Co	ontrol		37.8479	73°	37.847105°	
item				-121.324820 °		° -121.324577°	
DWR ID	D DWR_RD0	0544_01_s _ 201	2_8				
		Comn	nent Cod	de			
	rodents visib ot or grout but	ole, but rodent rrows.	burrows	visible; ne	ed to	backfill and	
Inspector Comment							
		rrows.		·	ed to	backfill and	



Looking southwest at several rodent holes on landward shoulder and slope.

LM Start	2.30	Rating **	М	Issue No.		90	
LM End	2.30	Issue Type +	Ma	Location *		CR	
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Crown Surface / Depressions / Rutting			37.8475	642°	37.847542 °	
				-121.3247	'32 °	-121.324732 °	
DWR ID DWR_RD0544_01_s _ 2017_90							
Comment Code							
C2 : Repair depressions or ruts in the crown or slope.							
Inspector Comment							
Sinkhole forming in crown.							



Looking at sinkhole on levee crown.

		5 // 44				
LM Start	2.31	Rating **	A/W	Issue No.		149
LM End	2.31	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.84732	27°	37.847327°
				-121.32466	63°	-121.324663 °
DWR ID	DWR_RD0544_01_f _ 2017_149					
Comment Code						
T1 : Trim trees to at least five feet above ground level.						

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.31	Rating **	A/W	Issue No.	128		
LM End	2.35	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	2017 Storm Damage			37.84730	00°	37.846800 °	
пеш			-121.32470	00°	-121.324400 °		
DWR ID DWR_RD0544_01_f _ 2017_128							
		Comn	nent Cod	le			

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:568

Site Designation:LMA-474 Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:

LM Start	2.31	Rating **	A/W	Issue No.	128 (cont)
LM End	2.35	Issue Type +	Ma	Location *	

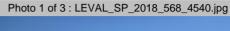




Photo 2 of 3: LEVAL_SP_2018_568_4545.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.31	Rating **	A/W	Issue No.	128 (cont)			
LM End	2.35	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	zategory					End		
Item	2017 Stor	37.84730	°	37.846800 °				
пеш	item				°	-121.324400 °		
DWR ID DWR_RD0544_01_f _ 2017_128								
		Comn	nent Coo	le				

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:568

Site Designation:LMA-474

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:



2.32	Rating **	U	Issue No.		34			
2.36	Issue Type + Ma Local		Location *		LS			
Category Earthen Levee				GPS Latitude/Longitude				
					End			
Animal Control				92 °	37.846743 °			
			-121.3246	62 °	-121.324336 °			
DWR ID DWR_RD0544_01_s _ 2012_34								
	2.36 Earthen L Animal Co	2.36 Issue Type + Earthen Levee Animal Control	2.36 Issue Type + Ma Earthen Levee Animal Control	2.36	2.36 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Animal Control 37.847292 ° -121.324662 °			

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

Several rodent hole within this reach.

Photo 1 of 3: SP_2018_RD0544_108_34_20180323_00029.jpg



Looking east at large rodent hole on landward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.32	Rating **	U	Issue No.	34 (cont)			
LM End	2.36	Issue Type +	Ма	Location *	LS			
Category	evee	GPS La	atitud	e/Longitude				
Calegory		Start		End				
Item	Animal Control				92°	37.846743 °		
пеш				-121.324662 °		-121.324336 °		
DWR ID	DWR_RD0	544_01_s _ 201	2_34					
	Comment Code							
A1 : Exterminate rodents and backfill and compact or grout burrows.								
		Inspecto	or Comm	nent				

Several rodent hole within this reach.





Looking south at several rodent holes on landward shoulder and slope.

Photo 3 of 3: SP_2018_RD0544_108_34_20180323_00031.jpg



Looking at rodent hole on levee crown.

LM Start	2.38	Rating **	М	Issue No.		67		
LM End	2.38	Issue Type +	En	Location *		LS		
Category	Earthen Levee				atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	37.8465	08°	37.846508°				
пеш				-121.3241	03 °	-121.324103 °		
DWR ID DWR_RD0544_01_s _ 2013_67								
		Comn	nent Cod	le				
BU : Building								
		Inspecto	or Comm	nent				
Building has been in place for several years.								



Looking southeast at building at landward toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.40	Rating **	М	Issue No.		68		
LM End	2.40	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach		37.8463	15°	37.846315 °			
пеш				-121.3238	75°	-121.323875 °		
DWR ID DWR_RD0544_01_s _ 2013_68								
Comment Code								
EQ : Equip	ment							
Inspector Comment								
Equipment on landside toe.								



Looking west at equipment at landward toe.

LM Start	2.43	Rating **	U	Issue No.		91	
LM End	2.43	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory			Start		End		
ltom	Slope Sta	bility		37.8459	73°	37.845973°	
пеш	Item -121.323373 ° -121.323373						
DWR ID DWR_RD0544_01_s _ 2017_91							
		Comp	nent Coc	10			

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Slope stability with depression in crown due to vehicle traffic.

Photo 1 of 1 : SP_2018_RD0544_108_91_20180323_00067.jpg



Looking south at depression on levee crown and landward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.43	Rating **	М	Issue No.		158	
LM End	2.43	Issue Type +	En	Location *			
Category	Catagory Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	IP Field Study		37.84596	88°	37.845968 °	
пеш				-121.3233	57 °	-121.323357 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:46671 DS_ID:22654 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil around the siphon breaker eroded.

FIELD_STRUCT_DESC: 8-inch drainage discharge pipe of an unknown material through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a drainage channel bank on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 10/29/2013

LM Start	2.43	Rating **	М	Issue No.	158 (cont)
LM End	2.43	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_46671_44836.jpg



WS view: exposed steel pipe and siphon breaker on levee slope.

Photo 2 of 3: UCIP_SP_2018_46671_44835.jpg



WS view: exposed steel pipe and soil erosion around siphon breaker on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.43	Rating **	М	Issue No.		158 (cont)
LM End	2.43	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		37.8459	68°	37.845968 °
пеш				-121.3233	57°	-121.323357 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:46671 DS_ID:22654 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil around the siphon breaker eroded.

FIELD_STRUCT_DESC: 8-inch drainage discharge pipe of an unknown material through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a drainage channel bank on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 10/29/2013



LS view: pump on drainage ditch bank about 140 ft from the levee.

LM Start	2.53	Rating **	A/W	Issue No.		129		
LM End	2.56	Issue Type +	Ма	Location *				
Category	Suppleme	ental	GPS Latitude/Longitude					
Calegory	Sta					End		
Item	2017 Stor	m Damage		37.84490	o°	37.844500 °		
пеш				-121.32230	o°	-121.321900 °		
DWR ID DWR_RD0544_01_f _ 2017_129								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:567

Site Designation:LMA-473 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: large rodent holes observed on landside slope.

Photo 1 of 3: LEVAL_SP_2018_567_4552.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.53	Rating **	A/W	Issue No.	129 (cont)		
LM End	2.56	Issue Type +	Ma	Location *			
Category	titud	le/Longitude					
Calegory		Start		End			
Item	2017 Stor	m Damage		37.84490	00°	37.844500°	
пеш	-121.322300 ° -121.321900						
DWR ID DWR_RD0544_01_f _ 2017_129							
	Comment Code						

Inspector Comment Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:567

Site Designation:LMA-473

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes: large rodent holes observed on landside slope.

LM Start	2.53	Rating **	A/W	Issue No.	129 (cont)
LM End	2.56	Issue Type +	Ma	Location *	





Photo 3 of 3: LEVAL_SP_2018_567_4556.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.53	Rating **	U	Issue No.		15			
LM End	2.53	Issue Type +	Ma	Location *		LS			
Cotogon	Earthen Levee					GPS Latitude/Longitude			
Category				Start		End			
Item	Slope Sta	bility		37.8448	80°	37.844880 °			
пеш				-121.3222	12 °	-121.322212°			
DWR ID	DWR ID DWR_RD0544_01_s _ 2018_15								
		Comn	nent Cod	le					
S1 : Repai	r slope ins	tability.							
	Inspector Comment								
Large finger erosions on landward slope.									

LM Start	2.53	Rating **	U	Issue No.	15 (cont)
LM End	2 53	Issue Type +	Ma	Location *	1.5



Lookiing southeast at slope damage on landward slope. (Spring 2018)

Photo 2 of 2: SP_2018_RD0544_108_15_20180427_00182.jpg



Looking south at slope erosion on landward slope. (Spring 2018)

LM Start	2.54	Rating **	М	Issue No.		60
LM End	2.58	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility		37.8447	65°	37.844253 °
пеш				-121.3221	43 °	-121.321850 °
DWR ID	DWR_RD0	544_01_s _ 201	2_60			
		Comn	nent Cod	le		
S2 : Repai where pos		slope damaç	jed by fo	ot traffic an	d pre	event access
		Inspecto	or Comm	nent		
Finger erosion on landside slope.						



Looking north at slope damage on landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.54	Rating **	М	Issue No.		60 (cont)
LM End	2.58	Issue Type +	Ма	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End	
Item	Slope Sta	bility		37.84476	5 °	37.844253 °
пеш			-121.32214	3°	-121.321850 °	
DWR ID DWR_RD0544_01_s _ 2012_60						

Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Finger erosion on landside slope.

Photo 2 of 2 : SP_2018_RD0544_108_60_20180323_00044.jpg



Looking south at slope damage on landside slope.

LM Start	2.57	Rating **	М	Issue No.		159
LM End	2.57	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC		37.8443	86°	37.844386 °	
пеш				-121.3218	94°	-121.321894°
DWR ID						

Comment Code

Inspector Comment

FS_ID:51361 DS_ID:22655 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Erosion has been backfilled. Slope has been repaired but unclear if the source of the erosion (a possible leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Siphon breaker on the landward shoulder not found. Service pole on landside. Huge erosion on landside and waterside of the levee due to the pipe leakage. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Air relief valve on the waterside (WS) shoulder. Concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.58), 16-inch pipe, 12 feet below the crown, referenced].

FS Date: 12/22/2016

Photo 1 of 3: UCIP_SP_2018_51361_44839.jpg



WS view: exposed pipe, walkway to pump, and pump on pile structure in the stream.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.57	Rating **	М	Issue No.		159 (cont)
LM End	2.57	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		37.84438	o o	37.844386
пеш				-121.32189	1°	-121.321894
DWR ID						

Comment Code

Inspector Comment

FS ID:51361 DS_ID:22655 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Erosion has been backfilled. Slope has been repaired but unclear if the source of the erosion (a possible leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Siphon breaker on the landward shoulder not found. Service pole on landside. Huge erosion on landside and waterside of the levee due to the pipe leakage. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Air relief valve on the waterside (WS) shoulder. Concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.58), 16-inch pipe, 12 feet below the crown, referenced). FS Date: 12/22/2016

Rating ** 2.57 M Issue No. LM Start 159 (cont) LM End 2.57 Issue Type + En Location

Photo 2 of 3: UCIP_SP_2018_51361_44838.jpg



WS view: exposed pipe, air relief valve, and huge erosion on levee slople.

Photo 3 of 3: UCIP_SP_2018_51361_44837.jpg



WS view: walkway to pump and pump on pile structure in the stream.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.84	Rating **	N	Issue No.		22		
LM End	2.84	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi		37.841075°		37.841075°			
пеш	item				05°	-121.320205 °		
DWR ID	DWR_RD0	544_01_s _ 201	2_22					
		Comn	nent Cod	le				
T5 : Tree s	stumps.							
	Inspector Comment							

No Photos

LM Start	2.87	Rating **	M	Issue No.		69	
LM End	2.87	Issue Type +	En	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Encroach	ments		37.8410	32 °	37.841032 °	
пеш				-121.3197	48 °	-121.319748°	
DWR ID DWR_RD0544_01_s _ 2013_69							
Comment Code							

RA: Ramp

Inspector Comment

Unauthorized ramp on waterside slope.

No Photos

LM Start	2.89	Rating **	U	Issue No.		106	
LM End	3.16	Issue Type +	Ma	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Vegetatio	n		37.8409	52 °	37.837588 °	
пеш				-121.31932	27°	-121.317540°	
DWR ID DWR_RD0544_01_s _ 2015_106							
Comment Code							

 ${\sf V2}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Dense williows and vegetation on waterside slope.

Photo 1 of 1: SP_2018_RD0544_108_106_20180323_00077.jpg



Looking southeast at dense willows (veg) on waterward slope and toe fall 2015.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.95	Rating **	М	Issue No.		107		
LM End	2.96	Issue Type +	Ма	Location *		LS		
Category Earthen Levee			GPS La	atitud	e/Longitude			
Calegory				Start		End		
Item	Erosion /		37.8405	60°	37.840467 °			
пеш				-121.3184	63°	-121.318367 °		
DWR ID DWR_RD0544_01_s _ 2015_107								
		Comn	nent Cod	le				
E1 : Note a	and monito	or erosion site	•					
		Inspecto	or Comm	nent				
Several depressions on landside slope within this reach.								

Rating **

Issue Type +

2.95

2.96

LM Start

LM End

	11	+	
	Arth.		A No.
(Carrier			
			2

Photo 1 of 2: SP_2018_RD0544_108_107_20180323_00078.jpg

Looking south at depression on landward slope.

M Issue No. 107 (cont)

Ma Location * LS

Photo 2 of 2: SP_2018_RD0544_108_107_20180323_00079.jpg



Looking west at depression on landward shoulder.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.95	Rating **	М	Issue No.		5
LM End	2.95	Issue Type +	Ма	Location *		WS
Catagony	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR Ero	sion Survey		37.8406	97°	37.840697°
item				-121.3182	52 °	-121.318252°
DWR ID	RD0544U0	1RM49.67				

Inspector Comment

Comment Code

09/13/2017: No significant change observed. 07/25/2016: No significant change observed.

06/24/2015: No significant change observed.

06/19/2014: No significant change observed.

08/13/2013: Pump has been removed. A larger pocket erosion has been found at the erosion site.

08/07/2012: The erosion is immediately upstream of a river bend. Dense vegetation is visible at the erosion site. [2017 Site

ID:RD0544U01RM49.67]



Photo 1 of 3: SP_2018_RD0544_108_5_20180323_00010.jpg



Front view of the erosion.

Photo 2 of 3: SP_2018_RD0544_108_5_20180323_00011.jpg



Front view of the erosion.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.95	Rating **	М	Issue No.		5 (cont)
LM End	2.95	Issue Type +	Ма	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR Ero	sion Survey		37.84069	7°	37.840697°
item		-121.31825	2 °	-121.318252°		
DWR ID	RD0544U0	1RM49.67				

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed. 06/24/2015: No significant change observed.

06/19/2014: No significant change observed.

08/13/2013: Pump has been removed. A larger pocket erosion has been found at the erosion site.

08/07/2012: The erosion is immediately upstream of a river bend.

Dense vegetation is visible at the erosion site. [2017 Site

ID:RD0544U01RM49.67]

Photo 3 of 3: SP_2018_RD0544_108_5_20180323_00012.jpg



Downstream view of the site.

LM Start	2.95	Rating **	U	Issue No.		47
LM End	3.19	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Category	Zategory					End
Item	Vegetatio	n		37.8404	85°	37.837225°
пеш				-121.3183	90°	-121.317408°
DWR ID	DWR_RD0	544_01_s _ 201	2_47			

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Photo 1 of 1: SP_2018_RD0544_108_47_20180323_00038.jpg



Looking south at dense veg on landward slope fall 2015.

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.98	Rating **	A/W	Issue No.		151	
LM End	3.18	Issue Type +	Ma	Location *		CR	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Vegetatio	n	37.8401	84°	37.837294°		
пеш				-121.318192 °		-121.317420°	
DWR ID DWR_RD0544_01_f _ 2017_151							
		Comn	nent Cod	le			
V2 : Remo	ve the wild	d growth other	than na	tive grasse	s fro	m the levee	
		Inspecto	or Comm	nent			



Looking south at the levee crown.

LM Start	3.07	Rating **	A/W	Issue No.		130		
LM End		Issue Type +	Ob	Location *				
Category				GPS Latitude/Longitude				
Category			Start		End			
Item	2017 Stor	m Damage		37.83888	o°		0	
пеш				-121.31821	o°		0	
DWR ID DWR_RD0544_01_f _ 2017_130								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:94

Site Designation:189-16 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.08	Rating **	М	Issue No.		108		
LM End	3.08	Issue Type +	Ма	Location *		LS		
Cotogony	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees		37.8387	33 °	37.838733 °		
пеш				-121.3179	18 °	-121.317918°		
DWR ID	DWR_RD0	544_01_s _ 201	5_108					
		Comn	nent Cod	le				
T1 : Trim t	rees to at l	east five feet	above g	round level.				
	Inspector Comment							

No Photos

LM Start	3.14	Rating **	М	Issue No.		76	
LM End	3.14	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory			Start		End		
Item	Erosion /	Bank Caving		37.8379	29°	37.837929	0
iteiii				-121.3176	63 °	-121.317663	0
DWR ID	DWR_RD0	544_01_f _ 201	3_76				

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Slope damaged extends from levee slope to shoulder.

Photo 1 of 1 : SP_2018_RD0544_108_76_20180323_00053.jpg



Looking east at slope damage on waterward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.16	Rating **	М	Issue No.		160	
LM End	3.16	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.83755	6°	37.837556°	
пеш				-121.31752	3°	-121.317523°	
DWR ID							

Comment Code

Inspector Comment

FS ID:51365 DS_ID:22656 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent, (K. Fazel -UCIP)10/29/2013:- huge levee slope erosion on landside. Walkway

to distro box on LS toe in poor structural condition.- 1-inch electric conduit, power pole on landside.- not clear whether this is a irrigation or drainage pipe. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 1 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)].

FS Date: 12/22/2016

LM Start	3.16	Rating **	М	Issue No.	160 (cont)
LM End	3.16	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_51365_42207.jpg



WS view: exposed steel pipes, levee slope, and pumphouse for 2nd pipe.

Photo 2 of 3: UCIP_SP_2018_51365_42206.jpg



WS view: exposed steel pipes on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.16	Rating **	М	Issue No.		160 (cont)
LM End	3.16	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.83755	6°	37.837556 °
пеш				-121.31752	3°	-121.317523°
DWR ID						

Comment Code

Inspector Comment

FS ID:51365 DS_ID:22656 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent, (K. Fazel -UCIP)10/29/2013:- huge levee slope erosion on landside. Walkway to distro box on LS toe in poor structural condition.- 1-inch electric

conduit, power pole on landside.- not clear whether this is a irrigation or drainage pipe. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 1 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)].

FS Date: 12/22/2016



WS view: exposed steel pipe immersed into the stream. No pump attached.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.17	Rating **	М	Issue No.		161	
LM End	3.17	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.8375	44 °	37.837544	0
пеш				-121.3175	17°	-121.317517	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:51366 DS_ID:22681 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Huge erosion and levee damage on landside slope due to the leaky pipe. Walkway to distro box on LS toe in poor

structural condition. (P. Amatya - DWR)
FIELD_STRUCT_DESC: 2 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6-foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964,

(HLM 3.19)]. FS Date: 12/22/2016

LM Start	3.17	Rating **	М	Issue No.	161 (cont)
LM End	3.17	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_51366_44845.jpg



WS view: exposed steel pipes, levee slope, and pumphouse.

Photo 2 of 3: UCIP_SP_2018_51366_44844.jpg



WS view: pipe daylights on levee slope. Siphon breaker removed and plugged.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.17	Rating **	М	Issue No.		161 (cont)
LM End	3.17	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.8375	44 °	37.837544°
пеш				-121.3175	17°	-121.317517 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51366 DS_ID:22681 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Huge erosion and levee damage on landside

slope due to the leaky pipe. Walkway to distro box on LS toe in poor structural condition. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 2 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6-foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)].

FS Date: 12/22/2016



WS view: exposed steel pipe (right) with flow meter near pumphouse.

LM Start	3.17	Rating **	tating ** M			62
LM End	3.17	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Slope Stability			37.8375	30°	37.837530°
пеш				-121.3175	10°	-121.317510°
DWR ID	DWR RD0544 01 s 2012 62					

Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Slope damage due to foot traffic.

Photo 1 of 1 : SP_2018_RD0544_108_62_20180323_00045.jpg



Looking east at slope damaged by foot traffic near pump house on waterside of levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.21	Rating **	A/W	Issue No.		131
LM End	3.22	Issue Type +	Ма	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	2017 Storm Damage			00°	37.836700°
пеш					00°	-121.317300 °
DWR ID	DWR_RD0544_01_f _ 2017_131					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:566

Site Designation:LMA-472 Repair Type: Erosion

Rating:Area of Concern Field Date:8/10/2017

Notes:

LM Start	3.21	Rating **	A/W	Issue No.	131 (cont)
LM End	3.22	Issue Type +	Ma	Location *	

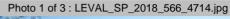




Photo 2 of 3: LEVAL_SP_2018_566_4717.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.21	Rating **	A/W	Issue No.	131 (cont)	
LM End	3.22	Issue Type +	Ma	Location *		
Catagony	Category Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	2017 Storm Damage			00°	37.836700 °
пеш				-121.31730	00°	-121.317300 °
DWR ID	DWR_RD0544_01_f _ 2017_131					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:566

Site Designation:LMA-472

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:



LM Start	3.22	Rating **	U	Issue No.		49
LM End	3.84	Issue Type +	Ma	Location *		WS
Category	Earthen Levee			GPS Latitude/Longitude		
Category				Start		End
Item	Vegetatio	Vegetation			63°	37.829195°
пеш				-121.31730)7°	-121.311918°
DWR ID	DWR_RD0544_01_s _ 2012_49					

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Dense vegetation on waterside slope.

Photo 1 of 1: SP_2018_RD0544_108_49_20180323_00040.jpg



Looking northeast at dense veg on waterward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.23	Rating **	U	Issue No.		48		
LM End	3.26	Issue Type +	Ma	Location *		LS		
Catagony	Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Vegetatio	Vegetation			5 °	37.836133	0	
пеш				-121.31728	85 °	-121.317153	0	
DWR ID	DWR_RD0544_01_s _ 2012_48							

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking south at typical view of dense veg on landward slope.

LM Start	3.28	Rating **	М	Issue No.		37		
LM End	3.28	Issue Type +	En	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachments			37.8359	51 °	37.835951°		
item			-121.3170	62 °	-121.317062°			
DWR ID	DWR_RD0544_01_s _ 2012_37							

Comment Code

RA: Ramp

Inspector Comment

Landowner has cut new ramp on waterside slope.



Looking north at ramp on waterward slope.

LM Start	3.48	Rating **	М	Issue No.		56	
LM End	3.48	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
				Start		End	
Item	Vegetation			37.83358	3°	37.833583	0
пеш				-121.31496	88°	-121.314968	٥
DWR ID	DWR_RD0	544_01_s _ 201	2_56				
	Comment Code						
V4 : Elderberries are blocking visibility and flood fight capability.							

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.49	Rating **	A/W	Issue No.		162
LM End	3.49	Issue Type +	Ma	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.83347	5°	37.833475 °
пеш				-121.31482	2°	-121.314822 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:24892 DS_ID:22658 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - pipe on channel bank looks comparatively new.pump approximately 500 ft. from the levee center on landside in drainage ditch.- a tall concrete standpipe and service pole near the

pump.

FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump and concrete standpipe in a drainage ditch on the landside (LS). Air vent on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.53)].

FS Date: 10/29/2013

LM Start	3.49	Rating **	A/W	Issue No.	162 (cont)
LM End	3.49	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_24892_44853.jpg



WS view: exposed steel pipe on bank of the channel.

Photo 2 of 3: UCIP_SP_2018_24892_44852.jpg



WS view: exposed steel pipe and air vent on the pipe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.49	Rating **	A/W	Issue No.		162 (cont)	
LM End	3.49	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	37.83347	5°	37.833475	0
пеш				-121.31482	2°	-121.314822	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:24892 DS_ID:22658 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - pipe on channel bank looks comparatively newpump approximately 500 ft. from the levee center on landside in drainage ditch.- a tall concrete standpipe and service pole near the pump.

FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump and concrete standpipe in a drainage ditch on the landside (LS). Air vent on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin

O&M Manual 7, April 1964, (HLM 3.53)].

FS Date: 10/29/2013

Photo 3 of 3 : UCIP_SP_2018_24892_44851.jpg

LS view: service pole, pump, and a concrete standpipe on bank of drainage ditch about 500 ft from the levee.

LM Start	3.49	Rating **	U	Issue No.		51		
LM End	4.67	Issue Type +	Ma	Location *		LS		
Cotogon Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		37.8334	32 °	37.821853 °		
пеш				-121.31479	92 °	-121.319992 °		
DWR ID DWR_RD0544_01_s _ 2012_51								
	Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Photo 1 of 1: SP_2018_RD0544_108_51_20180323_00041.jpg



Looking southeast at the landside slope.

Rating
A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.65	Rating **	A/W	Issue No.		132	
LM End	3.67	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
ltom	2017 Stor	m Damage		37.8318	00°	37.831600 °	
пеш	Item -12				00°	-121.312600 °	
DWR ID DWR_RD0544_01_f _ 2017_132							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:565

Site Designation:LMA-471 Repair Type: Erosion

Rating:Area of Concern Field Date:8/11/2017

Notes: dense shrubs on levee slope

LM Start	3.65	Rating **	A/W	Issue No.	132 (cont)
LM End	3.67	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_565_4741.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.65	Rating **	A/W	Issue No.		132 (cont)	
LM End	3.67	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Category			Start		End		
ltom	2017 Stor	m Damage		37.8318	00°	37.831600 °	
пеш	Item				00°	-121.312600 °	
DWR ID DWR_RD0544_01_f _ 2017_132							
		Comn	nent Cod	de			

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:565

Site Designation:LMA-471

Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: dense shrubs on levee slope



LM Start	3.69	Rating **	A/W	Issue No.		133	
LM End	3.73	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		37.8313	00°	37.830700	0
Item				-121.3126	00°	-121.312300	0
DWR ID	DWR_RD0	544_01_f _ 201	7_133				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:564

Site Designation:LMA-470

Repair Type: Erosion
Rating:Area of Concern
Field Date:8/11/2017

Notes: big rodent holes on levee slopes



* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.69	Rating **	A/W	Issue No.	133 (cont)				
LM End	3.73	Issue Type +	Ма	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory	ategory		Start		End				
Item	2017 Stor	m Damage		37.83130	00°	37.830700°			
пеш				-121.31260	00°	-121.312300 °			
DWR ID	DWR_RD0	R_RD0544_01_f _ 2017_133							
	Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:564

Site Designation:LMA-470

Repair Type: Erosion Rating:Area of Concern

Field Date:8/11/2017

Notes: big rodent holes on levee slopes

LM Start	3.69	Rating **	A/W	Issue No.	133 (cont)
LM End	3.73	Issue Type +	Ma	Location *	

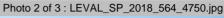




Photo 3 of 3: LEVAL_SP_2018_564_4756.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.76	Rating **	М	Issue No.		109		
LM End	3.92	Issue Type +	Ma	Location *		LS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Vegetatio		37.8302	50°	37.828013 °			
пеш		-121.312323 °		-121.311467 °				
DWR ID	DWR_RD0	544_01_s _ 201	5_109					
		Comn	nent Cod	le				
V4 : Elderk	perries are	blocking visib	ility and	flood fight	capa	bility.		
	Inspector Comment							

No Photos

LM Start	3.79	Rating **	A/W	Issue No.		134	
LM End	3.81	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory			Start		End		
Item	2017 Stor	m Damage		37.82980	00°	37.829600	0
iteiii				-121.31210	00°	-121.312100	0
DWR ID	DWR_RD0	544_01_f _ 201	7_134				

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:563

Site Designation:LMA-469

Repair Type: Erosion

Rating:Serious

Field Date:8/11/2017

Notes: site combined with LMA-468;see LMA-468 for details.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.81	Rating **	A/W	Issue No.	135			
LM End	3.82	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory	alegory			Start		End		
Item	2017 Stor	m Damage		37.8296	00°	37.829400 °		
пеш				-121.3120	00°	-121.312000 °		
DWR ID	DWR ID DWR_RD0544_01_f _ 2017_135							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:562

Site Designation:LMA-468

Repair Type: Erosion Rating:Serious

Field Date:8/11/2017

Notes: Site combined with LMA-469;

LM Start	3.81	Rating **	A/W	Issue No.	135 (cont)
LM End	3.82	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_562_4835.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.81	Rating **	A/W	Issue No.	135 (cont)		
LM End	3.82	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		37.82960	00°	37.829400 °	
пеш				-121.3120	00°	-121.312000 °	
DWR ID	DWR ID DWR_RD0544_01_f _ 2017_135						
		Comn	nent Cod	de			

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:562

Site Designation:LMA-468

Repair Type: Erosion Rating:Serious

Field Date:8/11/2017

Notes: Site combined with LMA-469;



LM Start	3.92	Rating **	U	Issue No.		11
LM End	4.05	Issue Type +	Ma	Location *	WS	
Category	Earthen L	evee	GPS Latitude/Longitude			
Category		Start		End		
Item	Animal Co	ontrol		37.82807	8°	37.826315°
пеш				-121.31148	3°	-121.311024°
DWR ID DWR_RD0544_01_s _ 2012_11						
		Comp	ont Coc	10		

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

Large rodent holes on waterside slope.

Photo 1 of 1: SP_2018_RD0544_108_11_20180323_00018.jpg



Looking at large rodent holes on waterward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.97	Rating **	М	Issue No.	24			
LM End	3.97	Issue Type +	Ma	Location *		LS		
Catagonia Earthen Levee				GPS Latitude/Longitude				
Category	tegory					End		
Item	Vegetatio	n		37.8273	60°	37.827360 °		
пеш				-121.3110	67°	-121.311067 °		
DWR ID	DWR_RD0	544_01_s _ 201	5_24					
	Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

LM Start	4.09	Rating **	С	Issue No.		123		
LM End	4.09	Issue Type +	Ma	Location *		LS		
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End		
Item	Encroach	ments		37.8259	03 °	37.825903 °		
пеш				-121.3114	66 °	-121.311466 °		
DWR ID	DWR_RD0	544_01_s _ 201	6_123			·		

Comment Code

TR: Tree or limb

Inspector Comment

Broken tree branch and prunings on landside slope.

No Photos

LM Start	4.25	Rating **	U	Issue No.		120	
LM End	4.28	Issue Type +	Ма	Location *		LS	
Category	Earthen L	arthen Levee			GPS Latitude/Longitude		
Calegory			Start		End		
Item	Trim / Thi	n Trees		37.82548	2 °	37.825229	0
item				-121.31429	8 °	-121.314771	0
DWR ID	DWR_RD0	544_01_f _ 201	5_120				

Comment Code

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

Several untrimmed trees on landside slope.



Photo 1 of 1: SP_2018_RD0544_108_120_20180323_00092.jpg



Looking southwest at untrimmed trees on landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.29	Rating **	М	Issue No.		163		
LM End	4.29 Issue Type		Issue Type + En Location *					
Category	Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UC	IP Field Study		37.82507	°	37.825071	0	
пеш				-121.314932	°	-121.314932	•	
DWR ID								

Comment Code

Inspector Comment

FS_ID:24893 DS_ID:22660 EP_NO: 11536

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breaker was removed from CMP riser on landside shoulder. Needs replacement.- some details about existing pipes available in new Application no. 18903.- electric control box on landside and conduit on waterside.

FIELD_STRUCT_DESC: 1 of 3: 12-inch coated steel irrigation discharge pipe through the levee, 3 feet below the crown. Pump on a pumping platform in the river with a walkway from the waterside (WS) slope. Siphon breaker in a corrugated metal pipe (CMP) riser and a concrete standpipe on the landside (LS). (Plans to install a platform and two irrigation pumps with two irrigation pipes and a drainage pipe through the levee, replacing an existing pump and irrigation pipe, authorized under Permit No. 11536, 1976 - Lloyd L. Phelps Sr). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.33), pipe referenced as 8 feet below the crown].

FS Date: 10/29/2013

LM Start	4.29	Rating **	М	Issue No.	163 (cont)
LM End	4.29	Issue Type +	En	Location *	



WS view: pipes, pumps, walkway to pump, and pile structure in the stream.

Photo 2 of 3: UCIP_SP_2018_24893_44857.jpg



WS view: pumps, walkway to pump, and pile structure in the stream.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.29	Rating **	М	Issue No.		163 (cont)	
LM End	4.29	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.82507	1°	37.825071	
пеш				-121.314932	2°	-121.314932	
DWR ID							

Comment Code

Inspector Comment

FS_ID:24893 DS_ID:22660 EP_NO: 11536

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breaker was removed from CMP riser on landside shoulder. Needs replacement.- some details about existing pipes available in new Application no. 18903.- electric control box on landside and conduit on waterside.

FIELD_STRUCT_DESC: 1 of 3: 12-inch coated steel irrigation discharge pipe through the levee, 3 feet below the crown. Pump on a pumping platform in the river with a walkway from the waterside (WS) slope. Siphon breaker in a corrugated metal pipe (CMP) riser and a concrete standpipe on the landside (LS). (Plans to install a platform and two irrigation pumps with two irrigation pipes and a drainage pipe through the levee, replacing an existing pump and irrigation pipe, authorized under Permit No. 11536, 1976 - Lloyd L. Phelps Sr). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.33), pipe referenced as 8 feet below the crown].

FS Date: 10/29/2013



LS view: CMP riser (top- for 12" pipe), CMP riser (bottom- for 16" pipe), and capped steel pipe (left)

LM Start	4.30	Rating **	М	Issue No.		59
LM End	4.30	Issue Type +	Ма	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Vegetation			37.824943 °		37.824943
item	m			-121.3150	08 °	-121.315008
DWR ID DWR_RD0544_01_s _ 2012_59						
Comment Code						

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Photo 1 of 1: SP_2018_RD0544_108_59_20180323_00042	.jpg

Looking south at dense veg on landward and waterward slopes.

* Location		** Rating		+ Issue Type
LS: Land Side N/A:	: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.34	Rating **	A/W	Issue No.	100	
LM End	4.34	Issue Type +	Ma	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Encroachments			37.824373 °		37.824373 °
пеш	item				07°	-121.315207°
DWR ID DWR_RD0544_01_s _ 2017_100						
Comment Code						

TR : Tree or limb

Inspector Comment

Broken tree limbs and branches on waterside slope.



Looking south at broken tree limb and branches on waterward slope.

LM Start	4.36	Rating **	М	Issue No.	102	
LM End	4.42	Issue Type +	Ma	Location *		CR
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
Item	Crown Surface / Depressions /			37.82417	70°	37.823494 °
пеш	Rutting		-121.31522	23 °	-121.315792°	
DWR ID	DWR_RD0544_01_f _ 2017_102					
Comment Code						

Comment Code

C3 : Add appropriate gravel or road base. Grade and compact.

Inspector Comment

No Photos

LM Start	4.41	Rating **	U	Issue No.		117	
LM End	4.79	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Vegetatio	n		37.8235	22 °	37.820557°	
пеш				-121.3157	35 °	-121.321217°	
DWR ID	DWR_RD0	544_01_s _ 201	7_117				

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking southwest at the waterside slope.

Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	
CP · Crown	

* Rating
A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.41	Rating **	U	Issue No.	117 (cont)	
LM End	4.79	Issue Type +	Ma	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item	Vegetation			37.823522°		37.820557°
пеш			-121.3157	35 °	-121.321217°	
DWR ID DWR_RD0544_01_s _ 2017_117						
Comment Code						

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking south at dense veg on waterward slope.

LM Start	4.46	Rating **	A/W	Issue No.		136
LM End	4.48	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	2017 Storm Damage			37.8232	00°	37.823000 °
пеш				-121.3164	00 °	-121.316800 °
DWR ID	DWR_RD0	544_01_f _ 201	7_136			

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:561

Site Designation:LMA-467

Repair Type: Erosion

Rating: Area of Concern

Field Date:8/11/2017

Notes: site combined with LMA-466 in field; length and coordinates redefined in field.

Photo 1 of 3: LEVAL_SP_2018_561_4862.jpg



N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.46	Rating **	A/W	Issue No.	136 (cont)				
LM End	4.48	Issue Type +	Ma	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Category				Start		End			
Itom	2017 Stor	m Damage		37.82320	00°	37.823000 °			
пеш	Item				00°	-121.316800 °			
DWR ID	DWR_RD0544_01_f _ 2017_136								
Comment Code									

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:561

Site Designation:LMA-467

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/11/2017

Notes: site combined with LMA-466 in field; length and coordinates redefined in field.

LM Start	4.46	Rating **	A/W	Issue No.	136 (cont)
LM End	4.48	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_561_4867.jpg



CR: Crown

Rating A : Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C: Corrected

Issue Type Ma: Maintenance Deficiency

Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.48	Rating **	A/W	Issue No.		138
LM End	4.48	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	Category					End
Item	2017 Stor	m Damage		37.82300	°	37.823000 °
пеш				-121.31670	°	-121.316800 °
DWR ID	DWR_RD0	544_01_f _ 201	7_138			

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:560

Site Designation:LMA-466

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/11/2017

Notes: site combined with LMA-467 in field; see LMA-467 for details.

LM Start	4.48	Rating **	М	Issue No.		103				
LM End	4.48	Issue Type +	Ma	Location *		LS				
Category Earthen Levee			GPS La	atitud	le/Longitude					
Category				Start		End				
Item	Animal Co	ontrol		37.8230	27°	37.823027 °				
ROIII				-121.3167	37°	-121.316737 °				
DWR ID	DWR_RD0	544_01_f _ 201	4_103							
		Comn	nent Cod	le						
A1 : Extern	minate rod	ents and back	fill and c	compact or	grou	it burrows.				
	Inspector Comment									

No Photos

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.49	Rating **	U	Issue No.		41		
LM End	4.49	Issue Type +	Ма	Location *	LS			
Category	Cotagoni Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End		
Item	Vegetatio	n		37.82293	4 °	37.822934 °		
item			-121.31687	0 °	-121.316870 °			
DWR ID DWR_RD0544_01_s _ 2012_41								

Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment



Looking south at elderberries on landside slope and toe.

LM Start	4.64	Rating **	U	Issue No.		104	
LM End	4.68	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS La	atitud	le/Longitude	
Calegory	Category					End	
Item	Trim / Thi	n Trees		37.8220	33°	37.821826	0
item				-121.3194	32 °	-121.320071	0
DWR ID	DWR_RD0	544_01_f _ 201	4_104				

Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

Dense untrimmed trees on landside slope.

Photo 1 of 1: SP_2018_RD0544_108_104_20180323_00075.jpg



Looking southwest at dense untrimmed trees on landward slope fall

LM Start	4.68	Rating **	U	Issue No.		27
LM End	4.69	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS La	titud	le/Longitude	
Calegory				Start		End
Item	Encroach	ments		37.8218	47 °	37.821793°
пеш				-121.32002	27 °	-121.320188°
DWR ID DWR_RD0544_01_s _ 2012_27						
Comment Code						

GA: Garbage

Inspector Comment

Tires stock pile on landside toe.

Photo 1 of 1: SP_2018_RD0544_108_27_20180323_00027.jpg



Looking west at tires stock pile on landward berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.69	Rating **	U	Issue No.	105	
LM End	4.69	Issue Type +	Ма	Location *	LS	
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Trim / Thi	n Trees		37.8217	75 °	37.821775°
пеш				-121.3202	03 °	-121.320203 °
DWR ID	DWR_RD0					
Comment Code						

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

Tree has overgrown onto levee crown.



Looking south at overgrown tree on landward shoulder.

LM Start	4.69	Rating **	М	Issue No.		111
LM End	4.69	Issue Type +	Ma	Location *	LS	
Category	Earthen L	GPS Latitude/Longitude				
Calegory				Start		End
Item	Encroach	ments		37.8217	83°	37.821783°
пеш				-121.3202	37 °	-121.320237 °
DWR ID	DWR_RD0	544_01_s _ 201	5_111			

Comment Code

PR: Prunings

Inspector Comment

Prunings on landside shoulder.

No Photos

LM Start	4.71	Rating **	A/W	Issue No.		29	
LM End	4.71	Issue Type +	Ma	Location *	r* CR		
Category Earthen Levee				GPS Latitude/Longitue			
Calegory						End	
Item	Animal Co	ontrol		37.82162	26°	37.821626	C
iteiii				-121.3204	71 °	-121.320471	C
DWR ID	DWR_RD0	544_01_s _ 201	2_29				
		Comn	nent Cod	le			

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

District has employed a rodent control program and grouted holes.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.71	Rating **	М	Issue No.		26
LM End	4.74	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS La	atitud	le/Longitude	
Category			Start		End	
Item	Vegetatio	n		37.8215	92°	37.821253 °
item				-121.3206	17°	-121.320927 °
DWR ID	DWR_RD0	544_01_s _ 201	2_26			
Comment Code						
V4 : Elderk	V4 : Elderberries are blocking visibility and flood fight capability.					

Inspector Comment

No Photos

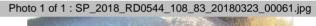
LM Start	4.74	Rating **	U	Issue No. 83		83
LM End	4.74	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	Animal Co	ontrol		37.8212	87°	37.821287°
пеш				-121.3208	97 °	-121.320897 °
DWB ID	DWB BD0	5// 01 f 201	6 83			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Large rodent hole on waterside shoulder.





Looking at large rodent hole on landward slope.

Photo 1 of 1: SP_2018_RD0544_108_45_20180323_00037.jpg

LM Start	4.75	Rating ** M		Issue No.		45
LM End	4.75 Issue Type + En Location *		Issue Type + En			LS
Category	Earthen L	GPS Latitude/Longitude				
Calegory			Start		End	
Item	Encroach	ments		37.8211	77°	37.821177°
пеш				-121.3210	13 °	-121.321013 °
DWR ID	DWR_RD0	544_01_s _ 201	2_45			

BU: Building

Inspector Comment

Comment Code

New unauthorized pump shed on landside toe.



Looking west at a unauthorized pump house on landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.75	Rating **	U	Issue No.		164			
LM End	4.75	Issue Type +	En	Location *		En Location *			
Category	ental	GPS Latitude/Longitude							
Calegory						End			
Item	DWR UC	IP Field Study		37.8211	53 °	37.821153	٥		
пеш				-121.3209	95 °	-121.320995	٥		
DWR ID									

Comment Code Inspector Comment

FS_ID:51379 DS_ID:22661 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: LS slope still eroded and in need of repair. WS slope shows no signs of problems. (K. Fazel - UCIP)10/31/2013:- huge erosion on landside slope due to leaky pipe.- small depression on waterside slope. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.4 feet below the crown. Pump house on the landside (LS) slope. Newly installed pump with a shutoff valve on the waterside (WS) slope. Pressure relief valve on the LS slope. Concrete distribution box with a shutoff valve on the pipe at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.79), 14-inch pipe, 12 feet below the crown, referenced]. FS Date: 12/22/2016

LM Start	4.75	Rating **	U	Issue No.	164 (cont)
LM End	4.75	Issue Type +	En	Location *	



WS view: exposed steel pipe on levee slope.

Photo 2 of 3: UCIP SP 2018 51379 44863.jpg



WS view: exposed steel pipe and a small depression on levee slope.

May be due to leaky pipe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.75	Rating **	U	Issue No.		164 (cont)		
LM End	4.75	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.8211	53 °	37.821153	0	
пеш					95 °	-121.320995	0	
DWR ID								

Comment Code

Inspector Comment

FS_ID:51379 DS_ID:22661 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: LS slope still eroded and in need of repair. WS slope shows no signs of problems. (K. Fazel - UCIP)10/31/2013:- huge erosion on landside slope due to leaky pipe.- small depression on waterside slope. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.4 feet below the crown. Pump house on the landside (LS) slope. Newly installed pump with a shutoff valve on the waterside (WS) slope. Pressure relief valve on the LS slope. Concrete distribution box with a shutoff valve on the pipe at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.79), 14-inch pipe, 12 feet below the crown, referenced]. FS Date: 12/22/2016



LS view: distribution box (top-left), pumphouse (right) and exposed leaky pipe on eroded levee slope.

LM Start	4.77	Rating **	A/W	Issue No.		112	
LM End	4.77	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	oi y			Start		End	
Item	Trim / Thi	n Trees		37.82082	28°	37.820828 °	
item				-121.32119	93 °	-121.321193 °	
DWR ID DWR_RD0544_01_s _ 2015_112					·		
	Comment Code						

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Photo 1 of 1: SP_2018_RD0544_108_112_20180323_00081.jpg



Looking southwest at dense trees on landward slope and toe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.77	Rating **	U	Issue No.		113	
LM End	4.77	Issue Type +	Ма	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Animal Co	ontrol		37.8208	28°	37.820828	0
пеш				-121.3211	93 °	-121.321193	0
DWR ID	R ID DWR_RD0544_01_s _ 2015_113						

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Large hole, possibly a rodent hole, on waterside slope.

Photo 1 of 1: SP_2018_RD0544_108_113_20180323_00082.jpg



Looking north at large hole on waterward slope.

LM Start	4.78	Rating **	М	Issue No.		165
LM End	4.78	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		37.8206	91 °	37.820691 °
пеш				-121.3211	59°	-121.321159°
DWR ID						·

Comment Code

Inspector Comment

FS_ID:42962 DS ID:22662 EP_NO: 1738

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

properly. No handle on gatevalve on WS slope.

FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Electrical conduit through the levee and on the landside (LS). Service pole on the LS. Two concrete standpipes on the LS. (Plans for the construction of a pipeline through the levee authorized under Permit No. 1738, 1953 - Barker Corporation). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin

O&M Manual 7, April 1964, (HLM 4.82)].

FS Date: 10/31/2013



WS view: slant pump on steel framed support, gate valve, and headwall on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.78	Rating **	М	Issue No.		165 (cont)	
LM End	4.78	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UC	IP Field Study		37.8206	91 °	37.820691	0
пеш				-121.3211	59°	-121.321159	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:42962 DS_ID:22662 EP_NO: 1738

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

properly. No handle on gatevalve on WS slope.

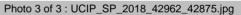
FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Electrical conduit through the levee and on the landside (LS). Service pole on the LS. Two concrete standpipes on the LS. (Plans for the construction of a pipeline through the levee authorized under Permit No. 1738, 1953 - Barker Corporation). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.82)].

FS Date: 10/31/2013

LM Start	4.78	Rating **	М	Issue No.	165 (cont)
LM End	4.78	Issue Type +	En	Location *	



WS view: gate valve without handwheel on levee slope.





LS view: two concrete standpipes and abandoned pump on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.80	Rating **	М	Issue No.		28
LM End	4.80	Issue Type +	En	Location *	CR	
Earthen Levee				GPS La	atitud	e/Longitude
Category			Start		End	
Item	Encroachments			37.820412 °		37.820412 °
пеш				-121.321193 °		-121.321193°
DWR ID	DWR_RD0	544_01_s _ 201	7_28			
		Comn	nent Cod	le		
PI : Pipe						
Inspector Comment						
Pipe instal	Pipe installed near surface of crown. Pipe is not connected on either					

Photo 1 of 1: SP_2018_RD0544_108_28_20180323_00028.jpg

Looking south at pipe across levee crown.

LM Start	4.97	Rating **	A/W	Issue No.		139
LM End	4.99	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory						End
Item	2017 Stor	m Damage		37.8186	00°	37.818400 °
item					00°	-121.319000 °
DWR ID	DWR_RD0	544_01_f _ 201	7_139			

Comment Code Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:559

Site Designation:LMA-465

Repair Type: Erosion

Rating:Serious

Field Date:8/11/2017

Notes:

side.

Photo 1 of 3: LEVAL_SP_2018_559_4887.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.97	Rating **	A/W	Issue No.	139 (cont)			
LM End	4.99	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	2017 Stor	m Damage		37.81860	00°	37.818400 °		
пеш				-121.31920	00°	-121.319000 °		
DWR ID	DWR_RD0544_01_f _ 2017_139							
Comment Code								

Inspector Comment
Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:559

Site Designation:LMA-465

Repair Type: Erosion

Rating:Serious

Field Date:8/11/2017

LM Start	4.97	Rating **	A/W	Issue No.	139 (cont)
LM End	4.99	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_559_4894.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.00	Rating **	С	Issue No.		17		
LM End	5.00	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
				Start		End		
Item	Vegetation			37.8181	52°	37.818152°		
nem				-121.319095 °		-121.319095 °		
DWR ID	DWR_RD0	544_01_s _ 201	7_17					
		Comn	nent Cod	le				
V4 : Elderl	V4 : Elderberries are blocking visibility and flood fight capability.							
	Inspector Comment							

LM Start	5.02	Rating **	М	Issue No.		125		
LM End	5.02	Issue Type +	Ma	Location *		LS		
Category Earthen Levee			GPS Latitude/Longitude					
Category				Start		End		
Animal Control			37.817942°		37.817942 °			
пеш				-121.3191	18°	-121.319118°		
DWR ID	DWR_RD0	544_01_s _ 201	7_125					
Comment Code								
11 . F.dom	minata rad	anta and baal	fill and a	omnost or	~=~.	t burrous		

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

		<u> </u>				<u> </u>	_
LM Start	5.07	Rating **	М	Issue No.		32	
LM End	5.07	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
				Start		End	
Item	Animal Control			37.8172	91°	37.817291	0
пеш				-121.319399 °		-121.319399	0
DWR ID	DWR_RD0	544_01_f _ 201	7_32				
		Comn	nent Coc	le			
A1 : Exteri	minate rod	ents and back	fill and c	compact or	grou	it burrows.	
		Inspecto	or Comm	nent			

No Photos

No Photos

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiency Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.32	Rating **	A/W	Issue No.	140			
LM End	5.36	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	2017 Stor	m Damage		37.81390	00°	37.813500 °		
пеш			-121.31990	00°	-121.319400 °			
DWR ID	DWR_RD0544_01_f _ 2017_140							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:558

Site Designation:LMA-464 Repair Type: Erosion

Rating:Serious

Field Date:8/16/2017

LM Start	5.32	Rating **	A/W	Issue No.	140 (cont)
LM End	5.36	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_558_4904.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.32	Rating **	A/W	Issue No.	140 (cont)	
LM End	5.36	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory						End
Item	2017 Stor	m Damage		37.81390	00°	37.813500°
пеш				-121.319900 °		-121.319400 °
DWR ID	DWR_RD0544_01_f _ 2017_140					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:558

Site Designation:LMA-464 Repair Type: Erosion

Rating:Serious

Field Date:8/16/2017

Notes:



LM Start	5.36	Rating **	A/W	Issue No.		141	
LM End	5.37	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		37.81340	00°	37.813300	0
пеш				-121.31930	00°	-121.319200	0
DWR ID	DWR_RD0	544_01_f _ 201	7_141				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:557

Site Designation:LMA-463

Repair Type: Erosion Rating:Area of Concern

Field Date:8/16/2017



* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintena
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design &
CD · Craves		I I . I In a a a a ntable	AMM: Accordable but Monitor & Maintain	Fn . Fnfassam

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.36	Rating **	A/W	Issue No.		141 (cont)	
LM End	5.37	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Category			Start		End		
Item	2017 Stor	2017 Storm Damage			00°	37.813300°	
пеш					00°	-121.319200 °	
DWR ID	DWR_RD0	544_01_f _ 201	7_141				

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:557

Site Designation:LMA-463

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/16/2017

Notes:

LM Start	5.36	Rating **	A/W	Issue No.	141 (cont)
LM End	5.37	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_557_4514.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.49	Rating **	U	Issue No.		18		
LM End	5.55	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Vegetatio	n		37.8120	33°	37.811687°		
item				-121.319737 °		-121.320677 °		
DWR ID	DWR ID DWR_RD0544_01_s _ 2012_18							
		Comn	nent Cod	le				
V4 : Elderl	perries are	blocking visib	ility and	flood fight	capa	bility.		
		Inspecto	or Comm	ent				
Elderberry	Elderberry exists on the slope of the levee.							

Photo 1 of 2: SP_2018_R	D0544_108_18_20180323_00021.jpg
A STATE OF THE STA	

Looking south at dense vegetation on landward slope and toe.(Spirng 2015) $\label{eq:continuous}$

Photo 2 of 2 : SP_2018_RD0544_108_18_20180323_00022.jpg



Looking south at elderberries on landside slope and toe.

LM Start	5.49	Rating **	U	Issue No.	18 (cont)
LM End	5.55	Issue Type +	Ma	Location *	LS

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.56	Rating **	A/W	Issue No.	142			
LM End		Issue Type +	Ob	Location *				
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude		
Calegory		Start		End				
Item	2017 Stor	17 Storm Damage		37.81183	0 °		0	
пеш				-121.32098	0 °		0	
DWR ID	DWR_RD0544_01_f _ 2017_142							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:95

Site Designation:189-4 Repair Type: Seepage

Rating: Field Date: Notes:

Photo 1 of 4 · SP	2018	RD0544	108	121	20180323	00093 ina

No Photos



LM Start	5.60	Rating **	U	Issue No.		121		
LM End	5.60	5.60 Issue Type +		Location *		WS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory			Start		End			
Item	Erosion /	Bank Caving		37.8112	34 °	37.811234°		
пеш				-121.3214	12 °	-121.321412°		
DWR ID DWR_RD0544_01_f _ 2015_121						·		
	Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Someone digging/excavating on waterward berm. Excavation in 3ft wide and eighteen inches deep and ten feet long.

Rating

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.60	Rating **	U	Issue No.	ssue No. 121 (cor	
LM End	5.60	Issue Type +	Ма	Location *	WS	
Category	GPS La	titud	e/Longitude			
Calegory				Start		End
Item	Erosion /	Bank Caving		37.81123	34 °	37.811234 °
Item				-121.32141	2 °	-121.321412 °
DWR ID	DWR_RD0	544_01_f _ 201	5_121			

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Someone digging/excavating on waterward berm. Excavation in 3ft wide and eighteen inches deep and ten feet long.

LM Start	5.60	Rating **	U	Issue No.	121 (cont)
LM End	5.60	Issue Type +	Ma	Location *	WS





Looking east at excavation on waterward berm.

Photo 3 of 4: SP_2018_RD0544_108_121_20180323_00095.jpg



Looking northeast at excavation on waterward berm

LM Start	5.60	Rating **	U	Issue No.	121 (cont)
LM End	5.60	Issue Type +	Ma	Location *	WS





Looking southeast at excavation on waterward berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.64	Rating **	N	Issue No.		40	
LM End	5.64	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi		37.8111	99°	37.811199	0	
item				-121.3221	76°	-121.322176	0
DWR ID	DWR_RD0	544_01_s _ 201	2_40				
		Comn	nent Cod	le			
T5 : Tree s	stumps.						
		Inspecto	or Comm	nent			

No Photos

LM Start	5.71	Rating **	U	Issue No.		166	
LM End	5.71	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lati	tud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study	,	37.811193	°	37.811193	0
iteiii				-121.323532	0	-121.323532	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:51384 DS_ID:22664 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: LS slope just above pipe is eroded with a giant pit exposing the electrical conduit. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- 2-inch electric conduit on waterside- service pole on landside.- needs a cover on pressure relief valve. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe through the levee, 5.3 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Pressure relief valve in a butterfly configuration at the apex of the pipe on the landside (LS). Two 36-inch concrete standpipes at the LS toe. Electrical conduit through the levee. Power pole at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.77)].

FS Date: 12/22/2016

Photo 1 of 3: UCIP_SP_2018_51384_42872.jpg



WS view: pump on pile structure, walkway to the punp on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.71	Rating **	U	Issue No.		166 (cont)
LM End	5.71	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.81119	3°	37.811193
пеш				-121.32353	2°	-121.323532
DWR ID						

Comment Code

Inspector Comment

FS_ID:51384 DS_ID:22664 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: LS slope just above pipe is eroded with a giant pit exposing the electrical conduit. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- 2-inch electric conduit on waterside- service pole on landside.- needs a cover on pressure relief valve. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe through the levee, 5.3 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Pressure relief valve in a butterfly configuration at the apex of the pipe on the landside (LS). Two 36-inch concrete standpipes at the LS toe. Electrical conduit through the levee. Power pole at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.77)].

FS Date: 12/22/2016

LM Start	5.71	Rating **	U	Issue No.	166 (cont)
LM End	5.71	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_SP_2018_51384_42871.jpg

WS view: pump on pile structure in the stream. Oil leaking pump.

Photo 3 of 3: UCIP_SP_2018_51384_42870.jpg



LS view: exposed pipe and pressure valve on levee slope. Two concrete standpipes on levee toe.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.72	Rating **	U	Issue No.		115	
LM End	5.72	Issue Type +	Ma	Location *	LS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory	legory			Start		End	
Item	Slope Sta	bility		37.8112	25 °	37.811225 °	
пеш				-121.3235	75 °	-121.323575 °	
DWR ID DWR_RD0544_01_s _ 2015_115							

Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Landowner excavated hole above pipe.Large hole left on landward shoulder and slope. Call LMA about repair.

LM Start	5.72	Rating **	U	Issue No.	115 (cont)
LM End	5.72	Issue Type +	Ma	Location *	LS

Photo 1 of 3: SP_2018_RD0544_108_115_20180323_00083.jpg



Looking west at large excavation on landward slope.

Photo 2 of 3: SP_2018_RD0544_108_115_20180323_00084.jpg



Looking south at large excavation on landward slope.

LM Start	5.72	Rating **	U	Issue No.	115 (cont)
LM End	5.72	Issue Type +	Ма	Location *	LS

Photo 3 of 3: SP_2018_RD0544_108_115_20180323_00085.jpg



Looking westly at large excavation on landward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

LM Start	5.72	Rating **	М	Issue No.		110				
LM End	5.72	Issue Type +	En	Location *	LS					
Category	Earthen Levee			GPS La	atituc	de/Longitude				
Calegory				Start		End				
Item	Encroach	ments		37.8112	05°	37.811205°				
пеш				-121.3236	06°	-121.323606 °				
DWR ID DWR_RD0544_01_f _ 2017_110										
	Comment Code									
PI : Pipe										
		Inspecto	or Comm	ent						
Discarded	Discarded pipe at toe of landside slope.									



Looking north at the landside slope.

LM Start	5.72	Rating **	М	Issue No.		126			
LM End	5.72	Issue Type +	En	Location *	WS				
Category	Earthen Levee			GPS La	titud	le/Longitude			
Category						End			
Item	Encroachments			37.8112	08°	37.811208°			
item				-121.3236	23 °	-121.323623 °			
DWR ID	DWR ID DWR_RD0544_01_s _ 2017_126								
Comment Code									

TR : Tree or limb

Inspector Comment

No Photos

LM Start	5.79	Rating **	С	Issue No.		122		
LM End	5.79	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		37.8112	71°	37.811271	0	
пеш				-121.324903 °		-121.324903		
DWR ID	DWR ID DWR_RD0544_01_f _ 2015_122							
		Comn	nent Cod	le				
GA : Garba	age						_	
		Inspecto	or Comm	nent				
Stockpile of concrete pipes on waterside slope and berm.								

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	04/26/2018 04/26/2018	Richard Willoughby

5.82	Rating **	A/W	Issue No.		124			
5.82	Issue Type +	Ma	Location *	LS				
Category Earthen Levee			GPS La	atitud	le/Longitude			
			Start		End			
Encroachi	ments		37.8110	49°	37.811049°			
			-121.325451 °		-121.325451 °			
DWR ID DWR_RD0544_01_s _ 2016_124								
Comment Code								
or limb								
	Inspecto	or Comm	nent					
	5.82 Earthen L Encroachi DWR_RD0	5.82 Issue Type + Earthen Levee Encroachments DWR_RD0544_01_s _ 201 Common limb	5.82 Issue Type + Ma Earthen Levee Encroachments DWR_RD0544_01_s _ 2016_124 Comment Coor	5.82 Issue Type + Ma Location * Earthen Levee GPS La Start Encroachments 37.8110 -121.3254 DWR_RD0544_01_s _ 2016_124 Comment Code	5.82 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Encroachments 37.811049 ° -121.325451 ° DWR_RD0544_01_s _ 2016_124 Comment Code or limb			

LM Start	5.82	Rating **	A/W	Issue No.	124 (cont)
LM End	5.82	Issue Type +	Ma	Location *	LS



Looking east at tree limbs on waterward slope.

Photo 2 of 2: SP_2018_RD0544_108_124_20180323_00101.jpg



N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles
Unit No. 02 Old River	Right	4.15

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/26/2018 - 4/26/2018			
DWR Inspector	Richard Willoughby			
Accompanied By	Richard Toy KSN			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.00	Rating **	М	Issue No.		31			
LM End	4.15	Issue Type +	Ma	Location *		LS			
Catagony	Category Earthen Levee			GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Vegetation			37.8087	42 °	37.822553 °			
пеш					33 °	-121.374670 °			
DWR ID	DWR_RD0	544_02_s _ 201	8_31						
	Comment Code								
V2 : Remove the wild growth other than native grasses from the levee slopes.									
	Inspector Comment								

No Photos

LM Start	0.00	Rating **	М	Issue No.		34		
LM End	4.15	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	_atitude/Longitude			
Calegory	Category			Start		End		
Vegetation			37.808742°		37.822553 °			
пеш	Item			-121.3282	34 °	-121.374670 °		
DWR ID DWR_RD0544_02_s _ 2018_34								
Comment Code								

No Photos

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Page 1 of 71

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.04	Rating **	A/W	Issue No.		35		
LM End	0.25	Issue Type +	Ob	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
Item	2017 Storm Damage			37.80882	0 °	37.808660 °		
пеш				-121.32885	0 °	-121.332460 °		
DWR ID	DWR_RD0	544_02_f _ 201	7_35					

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:97

Site Designation:334-102 Repair Type: Seepage

Rating: Field Date: Notes:

LM Start	0.21	Rating **	A/W	Issue No.		37		
LM End	0.23	Issue Type +	Ма	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory			Start		End			
Item	2017 Stor	m Damage		37.80830	00°	37.808400 °		
пеш				-121.33200	00°	-121.332200 °		
DWR ID	DWR_RD0	544_02_f _ 201	7_37					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:556

Site Designation:LMA-462 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017



* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.21	Rating **	A/W	Issue No.		37 (cont)				
LM End	0.23	Issue Type +	Ma	Location *						
Category	Suppleme	pplemental			GPS Latitude/Longitude					
Calegory				Start		End				
Item	2017 Storm Damage			37.80830	00°	37.808400 °				
пеш				-121.33200	00°	-121.332200 °				
DWR ID	R ID DWR_RD0544_02_f _ 2017_37									
	Comment Code									

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:556

Site Designation:LMA-462 Repair Type: Erosion

Rating:Area of Concern Field Date:8/16/2017

LM Start	0.21	Rating **	A/W	Issue No.	37 (cont)
LM End	0.23	Issue Type +	Ма	Location *	



Photo 3 of 3: LEVAL_SP_2018_556_4522.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.21	Rating **	U	Issue No.		2	
LM End	0.26	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetation			37.8083	31 °	37.808576 °	
пеш				-121.3319	97°	-121.332672 °	
DWR ID	DWR_RD0	544_02_s _ 201	8_2				
		Comn	nent Cod	le			
V2 : Remo	ve the wild	d growth other	than na	tive grasse	s fro	m the levee	
Inspector Comment							



Looking southeast at dense veg on waterward slope. (Spring 2018)

LM Start	0.26	Rating **	A/W	Issue No.	45	
LM End	0.42	Issue Type +	Ob	Location *		
Category Supplemental			GPS Latitude/Longitude			
Category			Start		End	
ltom	2017 Stor	m Damage		37.80872	20°	37.810060 °
Item				-121.33266	° 0	-121.334700 °
DWR ID	DWR_RD0	544_02_f _ 201	7_45			

Comment Code

Inspector Comment

Levee Evaluation Comments Description: Site ID No:96

Site Designation:334-100 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.40	Rating **	М	Issue No.		4	
LM End	0.40	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Vegetatio	n		37.8097	88°	37.809788 °	
пеш				-121.3347	27 °	-121.334727 °	
DWR ID DWR_RD0544_02_s _ 2012_4							
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

Rating ** Issue No. LM Start 0.43 Issue Type + Ma Location * LS LM End 1.12 Earthen Levee GPS Latitude/Longitude Category Vegetation 37.810250° 37.819452° Item -121.334933 ° -121.333755 DWR_RD0544_02_s _ 2012_1 DWR ID

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking southwest at dense vegetation at landward toe.

LM Start	0.44	Rating **	U	Issue No.		71		
LM End	0.44	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Erosion / Bank Caving			37.810388°		37.810388 °		
пеш				-121.3349	77 °	-121.334977 °		
DWR ID	DWR_RD0	544_02_s _ 201	7_71					
Comment Code								

Inspector Comment

Landside erosion due to runoff.



Looking northwest at runoff erosion on landward shoulder and slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence C: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.44	Rating **	A/W	Issue No.	70	
LM End	0.46	Issue Type +	Ma	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory			Start		End	
Item	2017 Stor	2017 Storm Damage			00°	37.810700°
пеш			-121.335000 °		-121.335000 °	
DWR ID DWR_RD0544_02_f _ 2017_70						·
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:555

Site Designation:LMA-461

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/16/2017

LM Start	0.44	Rating **	A/W	Issue No.	70 (cont)
LM End	0.46	Issue Type +	Ma	Location *	

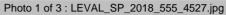




Photo 2 of 3: LEVAL_SP_2018_555_4624.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.44	Rating **	A/W	Issue No. 70		70 (cont)
LM End	0.46	Issue Type +	Ma	Location *		
Catagony	Supplemental Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		37.81040	00°	37.810700°
пеш					00°	-121.335000 °
DWR ID	DWR_RD0544_02_f _ 2017_70					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:555

Site Designation:LMA-461

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/16/2017

Notes:



LM Start	0.57	Rating **	A/W	Issue No. 80		80	
LM End	0.58	Issue Type +	Ma	Location *	on *		
Category	Suppleme	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End		
Item	2017 Stor	2017 Storm Damage		37.81230	00°	37.812400 °	
пеш					00°	-121.335100 °	
DWR ID	DWR_RD0	544_02_f _ 201	7_80				

Comment Code

Inspector Comment

Levee Evaluation Comments

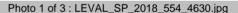
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:554

Site Designation:LMA-460

Repair Type: Erosion

Rating:Area of Concern Field Date:8/16/2017





* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.57	Rating **	A/W	Issue No.		80 (cont)	
LM End	0.58	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	2017 Storm Damage			00°	37.812400 °	
пеш	item		-121.33510	00°	-121.335100 °		
DWR ID	DWR_RD0	544_02_f _ 201	7_80				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:554

Site Designation:LMA-460

Repair Type: Erosion Rating:Area of Concern

Field Date:8/16/2017

LM Start	0.57	Rating **	A/W	Issue No.	80 (cont)
LM End	0.58	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_554_4636.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.71	Rating **	М	Issue No.		98	
LM End	0.71	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End		
Item	Animal Co	ontrol		37.8142	67°	37.814267 °	
пеш				-121.3346	27 °	-121.334627 °	
DWR ID	DWR_RD0	544_02_f _ 201	7_98				
		Comn	nent Cod	le			
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	ent			

No Photos

LM Start	0.72	Rating **	A/W	Issue No.		5	
LM End	0.72	Issue Type +	Ma	Location *		LS	
Category	Category Earthen Levee			GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetation			37.814333 °		37.814333	٥
пеш				-121.334592 °		-121.334592	٥
DWR ID	DWR_RD0544_02_s _ 2012_5						
Comment Code							
V4 : Elderk	perries are	blocking visib	ility and	flood fight	capa	ability.	

No Photos

Inspector Comment

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.72	Rating **	A/W	Issue No.		81
LM End	0.76	Issue Type +	Ob	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		37.8142	00°	37.814710°
пеш	1111		-121.3342	70°	-121.333830 °	
DWR ID	DWR_RD0	544_02_f _ 201	7_81			

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:91

Site Designation:334-106 Repair Type: Seepage

Rating: Field Date: Notes:

LM Start	0.78	Rating **	U	Issue No.		8					
LM End	0.78	Issue Type + Ma Location *).78 Issue Type + Ma Location *		0.78 Issue Type + Ma Location *		Location *		WS	
Category		nterior Drainage & Piping			GPS Latitude/Longitude						
Calegory	Systems			Start		End					
Item	Erosion A	Erosion Areas			94°	37.815094	0				
пеш				-121.3339	27 °	-121.333927	٥				
DWR ID	DWR_RD0	DWR_RD0544_02_s _ 2012_8									

Comment Code

Inspector Comment

Caving under and around siphon on waterside shoulder. No material 3' below pipe. Caving around siphon is 20" to 24" deep approximately 72" in diameter. During 2012 spring inspection hole appears to be enlarging.

Photo 1 of 4: SP_2018_RD0544_109_8_20180323_00010.jpg



Looking south at depression greater than 6" on waterside shoulder.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.		8 (cont)		
LM End	0.78	Issue Type +	Ма	Location *		WS		
Category	Interior Drainage & Piping			GPS Latitude/Longitude				
Calegory	Systems		Start		End			
Item	Erosion Areas		37.81509	94°	37.815094	0		
пеш			-121.33392	27 °	-121.333927	0		
DWR ID	DWR_RD0	544_02_s _ 201	2_8					

Comment Code

Inspector Comment

Caving under and around siphon on waterside shoulder. No material 3' below pipe. Caving around siphon is 20" to 24" deep approximately 72" in diameter. During 2012 spring inspection hole appears to be enlarging.

LM Start	0.78	Rating **	U	Issue No.	8 (cont)
LM End	0.78	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : SP_2018_RD0544_109_8_20180323_00011.jpg



Looking east at caving around siphon on waterside shoulder. (Spring 2012)

Photo 3 of 4: SP_2018_RD0544_109_8_20180323_00012.jpg



Looking west at caving around siphon on waterside shoulder. (Spring 2012)

LM Start	0.78	Rating **	U	Issue No.	8 (cont)
LM End	0.78	Issue Type +	Ma	Location *	WS



Looking south at caving around siphon on waterside shoulder.(Spring 2012)

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable U: Unacceptable U: Unacceptable WA: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.		103
LM End	0.78	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	alegory			Start		End
Item	DWR UCI	P Field Study		37.8150	98°	37.815098°
пеш				-121.3339	03 °	-121.333903 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51382 DS_ID:22665 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Same as last inspection. Suspect siphon breaker is leaking due to depression around it. Two giant rodent holes through WS slope at siphon breaker. Siphon breaker is silted in. (K. Fazel - UCIP)10/31/2013:- 8 ft X 7 ft X 4 ft depression around siphon breaker on waterside slope.- no pipe visible on waterside due to dense vegetation.- electric conduit and service pole on landside. (P.

Amatya - DWR)

FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 4 feet below the crown. Pump in a drainage ditch off the landside (LS) toe. Siphon breaker on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 12/22/2016

LM Start	0.78	Rating **	U	Issue No.	103 (cont)
LM End	0.78	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_51382_44882.jpg



WS view: depression on levee slope around siphon breaker.

Photo 2 of 3: UCIP SP 2018 51382 44881.jpg



WS view: depression on levee slope around siphon breaker. Siphon breaker in steel pipe riser.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.		103 (cont)
LM End	0.78	Issue Type +	En	Location *		
Category	Suppleme	Supplemental				e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		37.81509	98°	37.815098 °
пеш				-121.33390	03 °	-121.333903 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51382 DS_ID:22665 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Same as last inspection. Suspect siphon breaker is leaking due to depression around it. Two giant rodent holes through WS slope at siphon breaker. Siphon breaker is silted in. (K. Fazel - UCIP)10/31/2013:- 8 ft X 7 ft X 4 ft depression around siphon breaker on waterside slope.- no pipe visible on waterside due to dense vegetation.- electric conduit and service pole on landside. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 4 feet below the crown. Pump in a drainage ditch off the landside (LS) toe. Siphon breaker on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 12/22/2016

Photo 3 of 3 : UCIP_SP_2018_51382_44880.jpg

LS view: pump on timber support in drainage ditch. About 150 ft from levee center.

LM Start	1.01	Rating **	М	Issue No.	6		
LM End	1.01	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS La	titud	e/Longitude	
				Start		End	
Item	Encroach	ments		37.81810	0°	37.818100 °	
пеш				-121.33275	0°	-121.332750 °	
DWR ID DWR_RD0544_02_s _ 2012_6							
Comment Code							

GA: Garbage

Inspector Comment

Discarded wooden catwalk on waterside slope.

Photo 1 of 1: SP_2018_RD0544_109_6_20180323_00005.jpg



Looking southeast at garbage on waterside shoulder and slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.01	Rating **	A/W	Issue No.		82
LM End	1.02	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	2017 Stor	m Damage		37.81810	00°	37.818200 °
пеш				-121.33280	00°	-121.332800 °
DWR ID DWR_RD0544_02_f _ 2017_82						

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:552

Site Designation:LMA-458 Repair Type: Erosion

Rating:Area of Concern Field Date:8/16/2017

Notes:

LM Start	1.01	Rating **	A/W	Issue No.	82 (cont)
LM End	1.02	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_552_4811.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.01	Rating **	A/W	Issue No.	82 (cont)	
LM End	1.02	Issue Type +	Ма	Location *		
Supplemental				GPS La	atitud	le/Longitude
Calegory			Start		End	
Item	2017 Stor	m Damage		37.8181	00°	37.818200 °
пеш				-121.3328	00°	-121.332800 °
DWR ID DWR_RD0544_02_f _ 2017_82						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:552

Site Designation:LMA-458

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/16/2017

Notes:



LM Start	1.12	Rating **	A/W	Issue No.	20		
LM End	1.12	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS La	titud	le/Longitude	
				Start		End	
Item	Encroach	ments		37.8195	30°	37.819530°	
пеш			-121.3338	27 °	-121.333827 °		
DWR ID DWR_RD0544_02_s _ 2012_20							
Comment Code							

PR : Prunings

Inspector Comment

Landowner is stock piling prunings on landside slope and toe.

Photo 1 of 1: SP_2018_RD0544_109_20_20180323_00024.jpg



Looking southwest at pruning piles on landward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.13	Rating **	U	Issue No.		25		
LM End	1.19	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		37.8195	60°	37.820083 °		
item				-121.3338	93°	-121.334812 °		
DWR ID DWR_RD0544_02_s _ 2012_25								
		Comn	nent Cod	de				
DE : Debri	S							
		Inspecto	or Comm	nent				

1110: 1	4 42	Rating **	11	Issue No.	2E (cont)
LM Start	1.13	Railing	U	issue ivo.	25 (cont)
LM End	1.19	Issue Type +	En	Location *	LS

LM End



Looking south at farm equipment stored on landward shoulder and slope.

Photo 2 of 2: SP_2018_RD0544_109_25_20180323_00029.jpg



LM Start	1.15	Rating **	М	Issue No.	18			
LM End	1.22	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory			Start		End			
Encroachments			37.8198	30°	37.820235 °			
пеш	item			-121.334233 °		-121.335268 °		
DWR ID	DWR_RD0544_02_s _ 2012_18							
		Comn	nent Cod	le				
AV : Aban	doned veh	icles						
		Inspecto	or Comm	nent				
		•						
Vehicles and farm equipment stored on landside for several years. Levee crown is an oversized width.								



Looking southwest at farm equipment stored on landward landing. (spring 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.15	Rating **	М	Issue No.		18 (cont)
LM End	1.22	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroachments			37.81983	30°	37.820235 °
пеш				-121.33423	33 °	-121.335268 °
DWR ID	DWR_RD0544_02_s _ 2012_18					
Comment Code						

AV: Abandoned vehicles

Vehicles and farm equipment stored on landside for several years. Levee crown is an oversized width.

Inspector Comment

LM Start	1.15	Rating **	М	Issue No.	18 (cont)
LM End	1.22	Issue Type +	En	Location *	LS



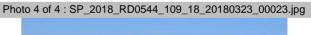
Looking southwest at equipment stored on landward shoulder. (spring

Photo 3 of 4: SP_2018_RD0544_109_18_20180323_00022.jpg



Looking southwest at vehicles and farm equipment stored on landside landing. (spring 2014)

LM St	art	1.15	Rating **	М	Issue No.	18 (cont)
LM E	nd	1.22	Issue Type +	En	Location *	LS





Looking southwest at farm equipment, vehicles, and other items stored on landside landing. (spring 2013)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.29	Rating **	U	Issue No.	101		
LM End	1.56	Issue Type +	Ma	Location *	WS		
Category	Earthen L	GPS La	atitud	le/Longitude			
Calegory					End		
Item	Vegetatio	getation			68°	37.822239°	
пеш			-121.3364	91 °	-121.340589°		
DWR ID	DWR_RD0	544_02_f _ 201	7_101				
		Comn	nent Cod	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							

Photo 1 of 1: SP_2018_RD0544_109_101_20180323_00098.jpg



Looking northwest at the waterside slope.

LM Start	1.29	Rating **	U	Issue No.		102
LM End	1.56	Issue Type +	Ma	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
Vegetation			37.8206	68°	37.822239°	
Item				-121.3364	91 °	-121.340589°
DWR ID	DWR RD0	544 02 f 201	7 102			

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment





Looking northwest at the landside slope.

LM Start	1.34	Rating **	М	Issue No.	56			
LM End	1.45	Issue Type +	Ma	Location *	LS			
Category	Earthen L	.evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Animal Control			37.8211	68°	37.822083	0	
пеш				-121.3372	12 °	-121.338862	0	
DWR ID	DWR_RD0	544_02_s _ 201	5_56					
Comment Code								

Inspector Comment

A1 : Exterminate rodents and backfill and compact or grout burrows.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.38	Rating **	М	Issue No.		104
LM End	1.38	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.82138	0°	37.821380°
пеш				-121.33783	5 °	-121.337835 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:46674 DS_ID:22668 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - slope erosion on landside.

FIELD_STRUCT_DESC: 8-inch pipe of an unknown material or purpose through the levee, 3.5 feet below the crown. Pipe open on both ends, 1991. Steel pipe riser on the landside (LS), but not sure whether it is connected to the pipe. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/31/2013

LM Start	1.38	Rating **	М	Issue No.	104 (cont)
LM End	1.38	Issue Type +	En	Location *	



WS view: steel pipe on levee slope with opened end.

Photo 2 of 3: UCIP_SP_2018_46674_44889.jpg



LS view: steel pipe on levee slope with opened end. Levee slope erosion around the pipe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.38	Rating **	М	Issue No.		104 (cont)	
LM End	1.38	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	GPS Latitude/Longitude		
Calegory		Start		End			
Item	DWR UC	IP Field Study		37.82138	o°	37.821380	0
Item				-121.33783	5°	-121.337835	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:46674 DS_ID:22668 EP_NO: N/A

LM Start

LM End

Category

Item

DWR ID

Repair Type: Non-Urgent Crossing Status: Found

1.38

1.38 Earthen Levee

Vegetation

UCIP Comments: - slope erosion on landside.

Rating **

Issue Type +

FIELD_STRUCT_DESC: 8-inch pipe of an unknown material or purpose through the levee, 3.5 feet below the crown. Pipe open on both ends, 1991. Steel pipe riser on the landside (LS), but not sure whether it is connected to the pipe. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/31/2013

Issue No.

Location *

37.821423°

-121.337878°

Photo 3 of 3: UCIP_SP_2018_46674_44888.jpg

LS view: steel pipe riser off the levee toe.

GPS Latitude/Longitude 37.821423 -121.337878 °

10

LS

Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Dense elderberry on landside slope and toe.

DWR_RD0544_02_s _ 2012_10

Photo 1 of 2: SP 2018 RD0544 109 10 20180323 00014.jpg



Looking southwest at elderberries on landside slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.38	Rating **	U	Issue No.		10 (cont)	
LM End	1.38	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start		End	
Vegetation			37.82142	23 °	37.821423 °		
item				-121.33787	78 °	-121.337878 °	
DWR ID	DWR_RD0	544_02_s _ 201	2_10				
Comment Code							
V4 : Elderberries are blocking visibility and flood fight capability.							

Inspector Comment

Dense elderberry on landside slope and toe.



Looking south at elderberries on landside slope and toe.

LM Start	1.39	Rating **	A/W	Issue No.		83	
LM End	1.41	Issue Type +	Ob	Location *			
Category	Suppleme	ental		GPS La	atitude/Longitude		
Category			Start		End		
Item	2017 Stor	m Damage		37.8214	40°	37.821620°	
пеш					50°	-121.338250 °	
DWR ID	DWR_RD0	544_02_f _ 201	7_83				

Comment Code

Levee Evaluation Comments

Description:

Field Date: Notes:

Inspector Comment

Site ID No:88 Site Designation:334-23

Repair Type: Seepage Rating:

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.40	Rating **	М	Issue No.		22	
LM End	1.42	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee			GPS La	le/Longitude		
Category				Start		End	
Item	Slope Stability			37.8215	18°	37.821697°	
пеш				-121.338092 ° -121.3			
DWR ID DWR_RD0544_02_s _ 2012_22							
		Comn	nent Cod	le			
S3 : Repai access wh		slope damag le.	ed by ve	ehicle traffic	and	d prevent	
		Inspecto	or Comm	nent			
Damage caused by vehicle traffic.							

			A A		
	The state of	11.12.72 12.52 Mari		THE Y	44,14
		100	400 100	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
		()	10.0		
	3 10				
		34%			A.P.
Lookir	og porthy	ect at c	lone da	mage ca	used b

Looking northwest at slope damage caused bey vehicle traffic (Fall 2014).

Photo 1 of 2: SP_2018_RD0544_109_22_20180323_00025.jpg

 LM Start
 1.40
 Rating **
 M
 Issue No.
 22 (cont)

 LM End
 1.42
 Issue Type +
 Ma
 Location *
 LS

Photo 2 of 2: SP_2018_RD0544_109_22_20180323_00026.jpg



Looking northwest at slope damage caused by vehicle traffic.

LM Start	1.44	Rating **	М	Issue No.		28			
LM End	1.44	Issue Type +	Ma	Location *		WS			
Category Earthen Levee			GPS La	atitud	le/Longitude				
Category				Start		End			
Item	Animal Co	ontrol		37.8219	54°	37.821954	0		
пеш				-121.3387	15 °	-121.338715	0		
DWR ID	DWR_RD0	544_02_s _ 201	2_28						
		Comn	nent Cod	le					
A1 : Extern	minate rod	ents and back	fill and o	compact or	grou	it burrows.			
		Inspecto	or Comm	nent					

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.46	Rating **	A/W	Issue No. 23		23	
LM End	1.46	Issue Type +	Ма	Location *		LS	
Cotogon Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Encroach	ments		37.8220	82 °	37.822082	0
пеш				-121.3389	32 °	-121.338932	0
DWR ID DWR_RD0544_02_s _ 2012_23							

Comment Code

TR: Tree or limb

Inspector Comment

Dead tree and limbs should be removed from landside shoulder and slope.



Looking north at dead tree and tree limbs on lanside shoulder and slope.

LM Start	1.51	Rating **	М	Issue No.		105		
LM End	1.51	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.8224	15 °	37.822415 °		
item				-121.3396	99°	-121.339699 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:24288 DS_ID:22669 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 10/31/2013

UCIP Comments: - two pumps with 16" steel pipe and an abundoned pump with 10" pipe inside pump house.- CMP riser cover needs repair. - electric conduits on waterside and power pole on landside. FIELD_STRUCT_DESC: 24-inch steel irrigation discharge pipe through the levee, 14 feet below the crown. Pump in a pump house on the waterside (WS) berm. Slide gate in a corrugated metal pipe (CMP) riser on the WS slope. Two corrugated metal cutoff walls. Distribution box and power pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.53)].

Photo 1 of 3: UCIP_SP_2018_24288_42947.jpg



WS view: slide gate in CMP riser, walkway, and pumphouse on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.51	Rating **	М	Issue No.		105 (cont)	
LM End	1.51	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.82241	5 °	37.822415	0
пеш				-121.33969	9°	-121.339699	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:24288 DS_ID:22669 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - two pumps with 16" steel pipe and an abundoned pump with 10" pipe inside pump house.- CMP riser cover needs repair. - electric conduits on waterside and power pole on landside. FIELD_STRUCT_DESC: 24-inch steel irrigation discharge pipe through the levee, 14 feet below the crown. Pump in a pump house on the waterside (WS) berm. Slide gate in a corrugated metal pipe (CMP) riser on the WS slope. Two corrugated metal cutoff walls. Distribution box and power pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.53)].

FS Date: 10/31/2013

LM Start	1.51	Rating **	М	Issue No.	105 (cont)
LM End	1.51	Issue Type +	En	Location *	



WS view: two pumps discharges water into CMP riser on levee slope.

Photo 3 of 3: UCIP_SP_2018_24288_42945.jpg



WS view: abandoned 10" steel pipe daylights on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.52	Rating **	М	Issue No.	106	
LM End	1.52	Issue Type +	En	Location *		
Category	Suppleme	ental	tal GPS Latitude/Longit			
Calegory				Start		End
Item	DWR UC	IP Field Study		37.82244	5°	37.822445 °
пеш				-121.33991	o°	-121.339910 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:24907 DS_ID:24716 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No pipe and appurtenances found on

waterside.Looks abandoned.

FIELD_STRUCT_DESC: *ABANDONED* 8-inch steel drainage discharge pipe through the levee, at an unknown depth. Pump house at the landside (LS) toe. Air vent in a corrugated metal pipe (CMP) riser on the LS shoulder. Outlet on the waterside (WS) not visible. No positive closure device. Appears abandoned.

FS Date: 10/31/2013

LM Start	1.52	Rating **	М	Issue No.	106 (cont)
LM End	1.52	Issue Type +	En	Location *	



LS view: pipe, pump house, and appurtenances on levee slope.

Photo 2 of 3: UCIP_SP_2018_24907_44894.jpg



LS view: pipe daylights on levee slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.52	Rating **	Issue No.		106 (cont)	
LM End	1.52	Issue Type +	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.82244	5 °	37.822445
пеш				-121.33991	0 °	-121.339910
DWR ID						

Comment Code

Inspector Comment

FS_ID:24907 DS_ID:24716 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No pipe and appurtenances found on

waterside.Looks abandoned.

FIELD_STRUCT_DESC: *ABANDONED* 8-inch steel drainage discharge pipe through the levee, at an unknown depth. Pump house at the landside (LS) toe. Air vent in a corrugated metal pipe (CMP) riser on the LS shoulder. Outlet on the waterside (WS) not visible. No positive

closure device. Appears abandoned.

FS Date: 10/31/2013



WS view: air vent on CMP riser on levee shoulder.

LM Start	1.72	Rating **	A/W	Issue No.		84		
LM End		Issue Type +	Ob	Location *				
Category	Suppleme	ental		GPS La	titud	e/Longitude		
Calegory				Start		End		
Item	2017 Storm Damage				0°		٥	
item			-121.34152	20°		٥		
DWR ID DWR_RD0544_02_f _ 2017_84								
	Comment Code							

Inspector Comment

Levee Evaluation Comments Description:

Site ID No:89

Site Designation:334-FOC-14 Repair Type: Seepage

Rating: Field Date: Notes:

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.77	1.77 Rating ** A/W				85
LM End	1.90	Issue Type +	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	m Damage		37.81929	o°	37.817590°
Item				-121.34146	o°	-121.341960 °
DWR ID	DWR_RD0	VR_RD0544_02_f _ 2017_85				
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:99

Site Designation:334-FOC-15

Repair Type: Seepage

Rating: Field Date: Notes:

LM Start	1.85	Rating **	A/W	Issue No. 8		86	
LM End		Issue Type +	Ob	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		37.8182	40 °		0
item				-121.34193	30°		0
DWR ID	DWR_RD0	544_02_f _ 201	7_86				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:90

Site Designation:334-19 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	1.86	U	Issue No.		38	
LM End	1.86	Ma	Location *		WS	
Category	Earthen L	evee	GPS La	titud	le/Longitude	
Calegory	alegoly					End
Item	Bank Caving	37.81798	33°	37.817983°		
пеш			-121.34168	32 °	-121.341682 °	
DWR ID DWR_RD0544_02_s _ 2015_38						
Comment Code						
E1 : Note and monitor erosion site.						

Inspector Comment

Erosion/Caving on waterside shoulder and slope 18" x 6" x 15'.

LM Start	1.86	Rating **	U	Issue No.	38 (cont)
LM End	1.86	Issue Type +	Ma	Location *	WS

Photo 1 of 2: SP_2018_RD0544_109_38_20180323_00036.jpg



Looking southeast at erosion/caving on waterward slope.

Photo 2 of 2: SP_2018_RD0544_109_38_20180323_00037.jpg



Looking east at erosion/caving on waterward slope.

LM Start	2.02	Rating **	U	Issue No.		58	
LM End	2.09	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Co	ontrol		37.8188	53°	37.819493°	
item				-121.3434	73°	-121.344545 °	
DWR ID DWR_RD0544_02_s _ 2015_58							
	Comment Code						
A1 : Exterr	minate rod	ents and back	fill and c	compact or	grou	t burrows.	
Inspector Comment							
Several rodent holes within reach on landside slope.							
·							



Looking at typical rodent holes on landward slope.

LS: Land Side N/A: Not Applicable A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency WS: Water Side M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence	* Location	** Rating	+ Issue Type
CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En : Enforcement			

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

		D-4: **		Innua Na		40	
LM Start	2.07	Rating **	U	Issue No.		13	
LM End	2.09	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category			Start		End		
Item	Vegetatio	Vegetation			37°	37.819460 °	
itom				-121.344275 °		-121.344492 °	
DWR ID	DWR_RD0	544_02_s _ 201	2_13				
Comment Code							
V4 : Elderberries are blocking visibility and flood fight capability.							

Inspector Comment

Photo 1 of 2 : SP	_2018_RD0544	_109_59_	_20180323_	_00047.jpg
THE REPORT OF THE PARTY OF THE	THE RESERVE OF THE PARTY OF THE		A STATE OF THE PARTY OF THE PAR	CONTRACTOR CONTRACTOR

No Photos



Looking northwest.at the landside slope.

LM Start	2.12	Rating **	A/W	Issue No.		59		
LM End	2.12	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.8197	38°	37.819738 °		
пеш				-121.3449	22 °	-121.344922 °		
DWR ID DWR_RD0544_02_s _ 2015_59								
		Comp	ant Coo	lo.				

Comment Code

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

Untrimmed trees on landside shoulder and slope.

LM Start	2.12	Rating **	A/W	Issue No.	59 (cont)
LM End	2.12	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : SP_2018_RD0544_109_59_20180323_00048.jpg



Looking southwest at untrimmed trees on landward slope and toe fall 2015.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.17	Rating **	A/W	Issue No.		87		
LM End	2.18	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	2017 Stor	m Damage		37.8203	00 °	37.820300°		
пеш			-121.345600 °		-121.345700 °			
DWR ID DWR_RD0544_02_f _ 2017_87								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:551

Site Designation:LMA-457

Repair Type: Erosion

Rating:Serious

Field Date:8/18/2017

Notes:

LM Start	2.17	Rating **	A/W	Issue No.	87 (cont)
LM End	2.18	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_551_4818.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.17	Rating **	A/W	Issue No.		Issue No. 87 (c		87 (cont)
LM End	2.18	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitud				
Calegory			Start		End			
Item	2017 Stor	m Damage		37.82030	00°	37.820300°		
item			-121.34560	00°	-121.345700°			
DWR ID	DWR_RD0	544_02_f _ 201	7_87					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:551

Site Designation:LMA-457

Repair Type: Erosion

Rating:Serious

Field Date:8/18/2017

Notes:



LM Start	2.18	Rating **	A/W	Issue No.		68						
LM End	2.18	Issue Type +	En	Location *		Location *		Location *		Location *		WS
Category Earthen Levee				GPS Latitude/Longitude								
Calegory			Start		End							
Item	Encroach	ments		37.820315°		37.820315°						
item			-121.345689 °		-121.345689°							
DWR ID DWR_RD0544_02_f _ 2016_68												
Comment Code												

TR: Tree or limb

Inspector Comment

Broken dead tree limb on waterside shoulder.

Photo 1 of 1: SP_2018_RD0544_109_68_20180323_00053.jpg



Looking at broken tree branch on waterward shoulder.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.18	Rating **	A/W	Issue No.	88		
LM End	2.19	Issue Type +	Ma	Location *			
Category	Supplemental					le/Longitude	
Calegory				Start	End		
Item	2017 Stor	m Damage		37.820400 °		37.820500°	
пеш				-121.3458	00°	-121.345900 °	
DWR ID DWR_RD0544_02_f _ 2017_88							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:550

Site Designation:LMA-456

Repair Type: Erosion Rating:Area of Concern

Field Date:8/18/2017

Notes:

LM Start	2.18	Rating **	A/W	Issue No.	88 (cont)
LM End	2.19	Issue Type +	Ma	Location *	



Photo 2 of 4: LEVAL_SP_2018_550_4564.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.18	Rating **	A/W	Issue No.		88 (cont)
LM End	2.19	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	2017 Stor	m Damage		37.82040	00°	37.820500°
пеш				-121.34580	00°	-121.345900 °
DWR ID	DWR_RD0	544_02_f _ 201	7_88			

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:550

Site Designation:LMA-456

Repair Type: Erosion

Rating:Area of Concern Field Date:8/18/2017

Notes:

LM Start	2.18	Rating **	A/W	Issue No.	88 (cont)
LM End	2.19	Issue Type +	Ma	Location *	



Photo 4 of 4: LEVAL_SP_2018_550_4575.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.20	Rating **	A/W	Issue No.		60	
LM End	2.20	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Trim / Thi	n Trees		37.8206	55 °	37.820655 °	
пеш				-121.3459	82 °	-121.345982 °	
DWR ID	DWR_RD0	544_02_s _ 201	5_60				
		Comn	nent Cod	le			
T1 : Trim t	rees to at	least five feet	above g	round level.			
	Inspector Comment						

LM Start	2.21	Railing	C	issue ivo.	ວບ			
LM End	2.21	Issue Type +	Ma	Location *	WS			
Category	Earthen L	evee		GPS Lat	Latitude/Longitude			
Category				Start		End		
Item	Encroach	ments		37.82064	6°	37.820646 °		
Item				-121.34601	-121.346014			
DWR ID	DWR_RD0	544_02_f _ 201	4_50					
Comment Code								
GA : Garb	age							

LM End	2.21	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory		Start		End			
Item	Encroach	ments		37.8206	646°	37.820646 °	
item				-121.346014°		-121.346014 °	
DWR ID	DWR_RD0	544_02_f _ 201	4_50				
		Comn	nent Cod	le			
GA : Garba	age						
		Inspecto	or Comm	nent			
Discarded	intake pip	e on waterside	e slope.				

LM End	2.21	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory		Start			End		
Item	Animal Co	ontrol	ol 37.820697°				0
item				-121.3460	50°	-121.346050	0
DWR ID	DWR_RD0	544_02_s _ 201	2_32				
		Comn	nent Cod	le			
	A3 : No rodents visible, but rodent burrows compact or grout burrows.					backfill and	
		Inspecto	or Comm	nent			

Μ

Issue No.

32

Rating **

LM Start

2.21

No Photos

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.21	Rating **	М	Issue No.		107
LM End	2.21	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	IP Field Study		37.82069	4 °	37.820694°
пеш			-121.34606	7°	-121.346067 °	
DWR ID						

Comment Code

Inspector Comment

FS_ID:41731 DS_ID:22675 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil erosion on landside slope.- new pump and pipe (according to the owner- three months old)- electric conduit

through levee, service pole on landside.

FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe and electrical conduit through the levee, 3 feet below the crown. Pump on a pile structure in the stream. Pressure breaker on the landside (LS) slope. Pipe exposed on both slopes and on the berm. [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.25), 12-inch pipe referencedl.

FS Date: 10/31/2013

LM Start	2.21	Rating **	М	Issue No.	107 (cont)
LM End	2.21	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_41731_42954.jpg



WS view: pipe, walkway, and pump on pile structure.

Photo 2 of 3: UCIP_SP_2018_41731_42953.jpg



WS view: closer view of pipe, walkway, and pump on pile structure.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.21	Rating **	М	Issue No.		107 (cont)	
LM End	2.21	Issue Type +	En	Location *			
Catagony	Category				GPS Latitude/Longitude		
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		37.82069	1°	37.820694°	
пеш				-121.34606	7 °	-121.346067°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:41731 DS_ID:22675 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil erosion on landside slope.- new pump and pipe (according to the owner- three months old)- electric conduit through levee, service pole on landside.

FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe and electrical conduit through the levee, 3 feet below the crown. Pump on a pile structure in the stream. Pressure breaker on the landside (LS) slope. Pipe exposed on both slopes and on the berm. [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.25), 12-inch pipe referenced].

FS Date: 10/31/2013

Photo 3 of 3: UCIP_SP_2018_41731_42957.jpg



LS view: service pole on levee slope.

LM Start	2.24	Rating **	M	Issue No.		33		
LM End	2.35	Issue Type +	Ма	Location *		LS		
Category	Earthen L	GPS La	atitud	e/Longitude				
Odiogory				Start		End		
Item	Animal Control			37.8210	96°	37.821945	0	
item				-121.3464	18°	-121.347897	0	
DWR ID	DWR_RD0544_02_s _ 2012_33							
0 10 1								

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.28	Rating **	A/W	Issue No.		61
LM End	2.28	Issue Type +	Ма	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Trim / Thi	n Trees		37.82147	3°	37.821473 °
пеш				-121.34686	0 °	-121.346860 °
DWR ID	DWR_RD0	544_02_s _ 201	5_61			

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Untrimmed tree on landside shoulder. Tree was trimmed but still requires additional trimming.

Photo 1 of 1 : SP_2018_RD0544_109_61_20180323_00049.jpg



Looking west at untrimmed trees on landward slope fall 2015.

LM Start	2.29	Rating **	М	Issue No.		108		
LM End	2.29	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory						End		
Item	DWR UC	IP Field Study		37.8216	28°	37.821628 °		
пеш			-121.3470	16°	-121.347016 °			
DWR ID								

Comment Code

Inspector Comment

FS_ID:24293 DS_ID:22676 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump not found on the landward side.

FIELD_STRUCT_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on the landside (LS). No flap gate on the waterside (WS) end. Air vent on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M

Manual 7, April 1964, (HLM 2.33)].

FS Date: 10/31/2013



WS view: exposed steel pipe on berm.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.29	Rating **	М	Issue No.		108 (cont)	
LM End	2.29	Issue Type +	En	Location *			Ī
Catagony	Category				GPS Latitude/Longitude		
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		37.82162	B°	37.821628	0
пеш				-121.34701	6°	-121.347016	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:24293 DS_ID:22676 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump not found on the landward side.

FIELD_STRUCT_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on the landside (LS). No flap gate on the waterside (WS) end. Air vent on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.33)].

FS Date: 10/31/2013

LM Start	2.29	Rating **	М	Issue No.	108 (cont)
LM End	2.29	Issue Type +	En	Location *	



WS view: 12" steel pipe connected to 10" pipe. Holes on pipe top found.

Photo 3 of 3: UCIP_SP_2018_24293_42966.jpg



LS view: exposed steel pipe and air vent on levee berm. No pump found.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.31	Rating **	М	Issue No.		11	
LM End	2.31	Issue Type +	Ма	Location *		WS	
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	DWR Erosion Survey			37.82176	63°	37.821763°	
пеш				-121.34727	75 °	-121.347275°	
DWR ID RD0544U02RM33.21							

Comment Code

Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/20/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. The data were estimated as the site is underneath a irrigation pump station and inaccessible by boat or land survey. It?s possible the pump station played a role in the erosion. [2017 Site

ID:RD0544U02RM33.21]

LM Start	2.31	Rating **	М	Issue No.	11 (cont)
LM End	2.31	Issue Type +	Ma	Location *	WS

Photo 1 of 3: SP_2018_RD0544_109_11_20180323_00016.jpg



Front view of the erosion site. View is partially blocked by the pump structure and vegetation at the site.

Photo 2 of 3: SP_2018_RD0544_109_11_20180323_00017.jpg



Front view of the site.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.31	Rating **	М	Issue No.		11 (cont)	
LM End	2.31	Issue Type +	Ма	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.82176	3°	37.821763	0
пеш					5°	-121.347275	0
DWR ID	RD0544U0	2RM33.21					

Inspector Comment

Comment Code

09/13/2017: No significant change observed. 07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/20/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. The data were estimated as the site is underneath a irrigation pump station and inaccessible by boat or land survey. It?s possible the pump station played a role in the erosion. [2017 Site ID:RD0544U02RM33.21]

Photo 3 of 3: SP_2018_RD0544_109_11_20180323_00018.jpg



Close view of the site.

LM Start	2.32	Rating **	A/W	Issue No.	89		
LM End	2.33	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category			Start		End	
Item	2017 Stor	m Damage		37.82180	00°	37.821900 °	
пеш				-121.34750	00°	-121.347600 °	
DWR ID DWR_RD0544_02_f _ 2017_89							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:549

Site Designation:LMA-455 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes:



* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.32	Rating **	A/W	Issue No.		89 (cont)
LM End	2.33	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Salegory					End
Item	2017 Storm Damage			37.82180	00°	37.821900°
пеш			-121.34750	00°	-121.347600°	
DWR ID DWR_RD0544_02_f _ 2017_89						

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:549

Site Designation:LMA-455

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

Notes:

LM Start	2.32	Rating **	A/W	Issue No.	89 (cont)
LM End	2.33	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_549_4654.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.48	Rating **	U	Issue No.		73			
LM End	2.59	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Vegetatio	n		37.8204	77°	37.819153 °			
пеш				-121.349345 °		-121.350231 °			
DWR ID DWR_RD0544_02_f _ 2017_73									
		Comn	nent Cod	le					
V2 : Remo	ove the wild	d growth other	than na	tive grasse	s fro	m the levee			
Inspector Comment									



Looking southwest at the landside slope.

LM Start	2.57	Rating **	A/W	Issue No.		75	
LM End	2.57	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		37.8193	73°	37.819373°	
пеш				-121.350077 °		-121.350077°	
DWR ID	DWR_RD0	544_02_s _ 201	7_75				
		Comn	nent Cod	de			
TR : Tree of	or limb						
Inspector Comment							
Dead tree	Dead tree limbs on waterside slope.						

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.61	Rating **	М	Issue No.		109
LM End	2.61	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory						End
Item	DWR UCI	IP Field Study		37.8188	88°	37.818888 °
пеш				-121.3503	90°	-121.350390 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51381 DS_ID:22678 EP_NO: 8625A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - abandoned crossing. Needs proper

abandonment.- pump removed. Pipe discontinued on landside.- pile

structure in dilapalated condion.

FIELD_STRUCT_DESC: 16-inch coated steel irrigation discharge pipe through the levee, 7 feet below the crown. Pump mounted on a pile structure in the stream. Siphon breaker on the landside (LS) shoulder. Power pole on the LS slope. (Retention of an existing 16-inch irrigation pipe and pump through the levee authorized under Permit No. 8625-A, 1973 - Irvin Muller). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.65), referenced as 10 feet below the crown].

FS Date: 10/31/2013

LM Start	2.61	Rating **	М	Issue No.	109 (cont)
LM End	2.61	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_51381_42972.jpg



WS view: dilapalated walkway and pile structure. Pump removed.

Photo 2 of 3: UCIP SP 2018 51381 42971.jpg



LS view: steel pipe cut out and disconditued (bottom).

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.61	Rating **	М	Issue No.		109 (cont)	
LM End	2.61	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	itud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.81888	8 °	37.818888	٥
пеш				-121.35039	o°	-121.350390	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:51381 DS_ID:22678 EP_NO: 8625A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - abandoned crossing. Needs proper

abandonment.- pump removed. Pipe discontinued on landside.- pile

structure in dilapalated condion.

FIELD_STRUCT_DESC: 16-inch coated steel irrigation discharge pipe through the levee, 7 feet below the crown. Pump mounted on a pile structure in the stream. Siphon breaker on the landside (LS) shoulder. Power pole on the LS slope. (Retention of an existing 16-inch irrigation pipe and pump through the levee authorized under Permit No. 8625-A, 1973 - Irvin Muller). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.65),

referenced as 10 feet below the crown].

FS Date: 10/31/2013

Photo 3 of 3: UCIP_SP_2018_51381_42970.jpg



LS view: inside view of cut open pipe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.61	Rating **	U	Issue No.		110
LM End	2.61	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.81886	°	37.818860°
пеш				-121.350428	3°	-121.350428 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51380 DS_ID:24718 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Pipe is open on both ends and requires either proper abandonment or flap gate and closure device. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- needs proper abandonment or closer of pipe

end. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 14-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Pipe open on both ends. 1-inch open conduit also at this location. This crossing was field discovered.

FS Date: 12/22/2016

LM Start	2.61	Rating **	U	Issue No.	110 (cont)
LM End	2.61	Issue Type +	En	Location *	



WS view: steel pipe and electric conduit on levee shoulder.

Photo 2 of 3: UCIP_SP_2018_51380_42976.jpg



LS view: steel pipe and electric conduit on levee shoulder.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.61	Rating **	U	Issue No.		110 (cont)
LM End	2.61	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.81886	o°	37.818860 °
пеш				-121.35042	3°	-121.350428 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51380 DS_ID:24718 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2016: Pipe is open on both ends and requires either proper abandonment or flap gate and closure device. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- needs proper abandonment or closer of pipe

end. (P. Amatya - DWR)

FIELD_STRUCT_DESC: 14-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Pipe open on both ends. 1-inch open conduit also at this location. This crossing was field discovered.

FS Date: 12/22/2016



WS view

LM Start	2.61	Rating **	U	Issue No.		69
LM End	2.61	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Erosion /	Bank Caving		37.81880)6°	37.818806°
пеш				-121.35043	37 °	-121.350437 °
DWR ID	DWR_RD0	544_02_f _ 2010	6_69			

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.

Photo 1 of 5: SP_2018_RD0544_109_69_20180427_00132.jpg



Looking south at erosion on shoulder. (Spring 2018)

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.61	Rating **	U	Issue No.		69 (cont)	
LM End	2.61	Issue Type +	Ма	Location *		WS	
Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Erosion / Bank Caving			37.8188	06 °	37.818806 °	
пеш				-121.3504	37°	-121.350437 °	
DWR ID	DWR_RD0	544_02_f _ 201	6_69				

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.

LM Start	2.61	Rating **	U	Issue No.	69 (cont)
LM End	2.61	Issue Type +	Ma	Location *	WS

Photo 2 of 5 : SP_2018_RD0544_109_69_20180427_00133.jpg



Looking east at erosion on waterward slope. (Spring 2018)

Photo 3 of 5: SP_2018_RD0544_109_69_20180323_00054.jpg



Looking south at erosion on waterward shoulder and slope.

Photo 4 of 5: SP_2018_RD0544_109_69_20180323_00056.jpg

LM Start 2.61		Rating **	U	Issue No.	69 (cont)
LM End	2.61	Issue Type +	Ma	Location *	WS



Looking south at waterward erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.61	Rating **	U	Issue No.		69 (cont)	
LM End	2.61	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory						End	
Item	Erosion / Bank Caving			37.8188	06°	37.818806 °	
item		-121.3504	37°	-121.350437 °			
DWR ID DWR_RD0544_02_f _ 2016_69							

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.

Photo 5 of 5: SP_2018_RD0544_109_69_20180323_00055.jpg



Looking north at erosion on waterward shoulder and slope.

LM Start	2.67	Rating **	M	Issue No.		76
LM End	2.67	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
Animal Control			37.8181	12°	37.818112°	
item		-121.3511	° 80	-121.351108°		
DWR ID DWR_RD0544_02_s _ 2017_76						

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.68	Rating **	М	Issue No.		M Issue No. 7		7
LM End	2.70	Issue Type +	Ma	Location *		WS		
Category			GPS Latitude/Longitude					
Calegory				Start		End		
Item	DWR Ero	sion Survey		37.81790	05°	37.817905 °		
пеш			-121.35110)2 °	-121.351102 °			
DWR ID	RD0544U0	2RM32.91						

Comment Code

Inspector Comment 09/13/2017: No significant change observed. 07/25/2016: No significant change observed. 06/25/2015: No significant change observed. 07/02/2014: No significant change observed. 10/11/2013: No significant change observed.

08/07/2012: Series of pocket erosion were discovered at the levee toe during the boat survey. The area is covered with vegetation and riprap, but the rip rap has been washed away. [2017 Site ID:RD0544U02RM32.91]

LM Start	2.68	Rating **	М	Issue No.	7 (cont)
LM End	2.70	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SP_2018_RD0544_109_7_20180323_00006.jpg



Front view of the pocket erosion. Note vegetation and riprap at the site.

Photo 2 of 2: SP_2018_RD0544_109_7_20180323_00007.jpg



Front view of the pocket erosion.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.68	Rating **	A/W	Issue No.		Issue No.		90
LM End	2.71	Issue Type +	Ma	Location *				
Category Supplemental			GPS Latitude/Longitude					
Calegory				Start		End		
Item	2017 Storm Damage			37.8180	00°	37.817800 °		
пеш			-121.3512	00°	-121.351500 °			
DWR ID	DWR_RD0	544_02_f _ 201	7_90					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:548

Site Designation:LMA-454

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

LM Start	2.68	Rating **	A/W	Issue No.	90 (cont)
LM End	2.71	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_548_4666.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.68	Rating **	A/W	Issue No.		90 (cont)
LM End	2.71	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory			Start		End	
Item	2017 Storm Damage			37.8180	00°	37.817800°
пеш			-121.351200 °		-121.351500°	
DWR ID	DWR_RD0544_02_f _ 2017_90					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:548

Site Designation:LMA-454

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017



LM Start	2.69	Rating **	U	Issue No.		52		
LM End	3.11	Issue Type +	Ma	Location *	CR			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category			Start		End			
Item	Vegetation	getation			28°	37.817698°		
item				-121.351355 °		-121.358582 °		
DWR ID	DWR_RD0	544_02_f _ 201	4_52					
Comment Code								
V9 : Keep the crown roadway free of vegetation.								

Comment Code	
dway free of vegetation.	
Inspector Comment	



Looking south at veg on levee crown. (Spring 2018)

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

							_
LM Start	2.69	Rating **	U	Issue No.		52 (cont)	
LM End	3.11	Issue Type +	Ma	Location *	CR		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory		Start		End			
ltem Vegetation			37.8179	28°	37.817698	2	
			-121.351355 °		-121.358582	2	
DWR ID DWR_RD0544_02_f _ 2014_52							
		Comn	nent Cod	le			ı
V9 : Keep the crown roadway free of vegetation.							
Inspector Comment							

		and the same of th
2.44 M		
NAME OF TAXABLE PARTY.	water.	4 4

Photo 2 of 3: SP_2018_RD0544_109_52_20180323_00043.jpg



Looking south at vegetation on levee crown.

2.69 Rating ** Issue No. 52 (cont) LM Start 3.11 Issue Type + Ма Location * CR LM End

Photo 3 of 3: SP_2018_RD0544_109_52_20180323_00042.jpg



Looking southwest at levee crown.

LM Start	2.71	Rating **	U	Issue No.		43		
LM End	3.45	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		37.8177	47°	37.819583 °		
пеш				-121.351578°		-121.363559 °		
DWR ID	DWR_RD0	544_02_s _ 201	2_43					
		Comn	nent Cod	le				
V2 : Remo	ve the wild	growth other	than na	tive grasse	s froi	m the levee		
Inspector Comment								



Looking southwest and levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

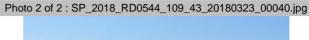
Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.71	Rating **	U	Issue No.		43 (cont)		
LM End	3.45	Issue Type +	Ma	Location *		LS		
Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Itom	Vegetatio	n		37.8177	47°	37.819583°		
пеш	Item			-121.351578 °		-121.363559°		
DWR ID DWR_RD0544_02_s _ 2012_43								
	Comment Code							

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment





Looking at dense vegetation on landward and waterward slope.

LM Start	2.76	Rating **	A/W	Issue No.		Issue No.		Issue No.		91
LM End	2.77	Issue Type +	Ma	Location *						
Category	Supplemental				GPS Latitude/Longitude					
Calegory				Start		End				
Item	2017 Stor	m Damage		37.8174	00°	37.817300°				
item				-121.3523	00 °	-121.352500 °				
DWR ID	DWR_RD0	544_02_f _ 201	7_91							

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:547

Site Designation:LMA-453

Repair Type: Erosion

Rating: Area of Concern

Field Date:8/18/2017

Notes: levee slopes covered in dense vegetations that hindered visibility.

Photo 1 of 3: LEVAL_SP_2018_547_4677.jpg



N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.76	Rating **	A/W	Issue No.		91 (cont)		
LM End	2.77	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Category			Start		End			
Itom	2017 Stor	m Damage		37.8174	00°	37.817300 °		
пеш	Item				00°	-121.352500 °		
DWR ID	DWR ID DWR_RD0544_02_f _ 2017_91							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:547

Site Designation:LMA-453

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

Notes: levee slopes covered in dense vegetations that hindered visibility.

LM Start	2.76	Rating **	A/W	Issue No.	91 (cont)
LM End	2.77	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_547_4688.jpg



N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	2.80	Rating **	A/W	Issue No.		53		
LM End	2.80	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Trim / Thi	n Trees		37.817187°		37.817187°		
пеш				-121.352964°		-121.352964°		
DWR ID DWR_RD0544_02_f _ 2014_53								
	Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment



Looking southwest at untrimmed tree on landward slope fall 2015.

LM Start	3.10	Rating **	U	Issue No.		77		
LM End	3.10	Issue Type +	Ma	Location *		WS		
Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Erosion / Bank Caving				88 °	37.817588 °		
пеш			-121.358352 °		-121.358352 °			
DWR ID DWR_RD0544_02_s _ 2017_77								

Comment Code

E1: Note and monitor erosion site.

Inspector Comment

Rip rap was placed but does not meet Title 23 standards.



Looking northeast at conrete rubble on waterward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.11	Rating **	A/W	Issue No.		92		
LM End	3.12	Issue Type +	Ma	Location *				
Category Supplemental			Supplemental GPS Latitude/Longitu					
Calegory			Start		End			
Item	2017 Stor	m Damage		37.81770	00°	37.817800°		
пеш				-121.35860	00°	-121.358700 °		
DWR ID	DWR_RD0544_02_f _ 2017_92							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:546

Site Designation:LMA-452

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

Notes: dense vegetations on both sides of the levee made the slopes inaccessiable

LM Start	3.11	Rating **	A/W	Issue No.	92 (cont)
LM End	3.12	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_546_4695.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.11	Rating **	A/W	Issue No.		92 (cont)		
LM End	3.12	Issue Type +	Ma	Location *				
Category			GPS Latitude/Longitude					
Calegory			Start		End			
Item	2017 Stor	m Damage		37.81770	00°	37.817800°		
пеш			-121.35860	00°	-121.358700 °			
DWR ID	DWR_RD0544_02_f _ 2017_92							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:546

Site Designation:LMA-452

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

Notes: dense vegetations on both sides of the levee made the slopes

inaccessiable



LM Start	3.20	Rating **	М	Issue No.		30				
LM End	3.40	Issue Type +	Ma	Location *		WS				
Category	Earthen L	GPS Latitude/Longitude								
Calegory				Start		End				
Item	Animal Co	nimal Control			48 °	37.819717°				
item				-121.3594	40 °	-121.362733 °				
DWR ID	DWR_RD0	544_02_s _ 201	3_30							
Comment Code										
A1 : Exterr	A1 : Exterminate rodents and backfill and compact or grout burrows.									

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side CR : Crown	M : Minimally Acceptable U : Unacceptable	C : Corrected A/W : Acceptable but Monitor & Maintain	Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.20	Rating **	М	Issue No.		111	
LM End	3.20	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	IP Field Study		37.81882	24 °	37.818824°	
пеш				-121.35952	26°	-121.359526 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:24908 DS_ID:22679 EP_NO: 16972

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump not found on the waterward side.Damaged pipe-plug on waterside. Pipe exposed on both sides of the levee. FIELD_STRUCT_DESC: 1 of 2: 8-inch polyvinyl chloride (PVC) drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS). Pump on a steel platform in a drainage ditch. (Plans to replace the existing 6-inch drainage pipeline with a 14-inch steel pipeline and to replace two existing 8-inch pipelines with two 8-inch drainage discharge pipelines through the levee authorized under Permit No. 16972, 1999 - Joseph I. and Gayle Muller, TR). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 10/31/2013

LM Start	3.20	Rating **	М	Issue No.	111 (cont)
LM End	3.20	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_SP_2018_24908_44898.jpg



WS view: 12" steel pipe (top), two 8" white pvc pipes (bottom) on levee shoulder.

Photo 2 of 3: UCIP_SP_2018_24908_44897.jpg



WS view: 8" white pvc pipe with siphon breaker on levee shoulder. An unplugged hole on the pipe.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.20	Rating **	М	Issue No.		111 (cont)			
LM End	3.20	Issue Type +	En	Location *					
Category Supplemental				Supplemental GPS Latitude				e/Longitude	
Calegory				Start		End			
Item	DWR UCIP Field Study			37.8188	24°	37.818824	٥		
item				-121.3595	26°	-121.359526	0		
DWR ID									

Comment Code

Inspector Comment

FS_ID:24908 DS_ID:22679 EP NO: 16972

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump not found on the waterward side.Damaged pipe-plug on waterside. Pipe exposed on both sides of the levee. FIELD_STRUCT_DESC: 1 of 2: 8-inch polyvinyl chloride (PVC) drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS). Pump on a steel platform in a drainage ditch. (Plans to replace the existing 6-inch drainage pipeline with a 14-inch steel pipeline and to replace two existing 8-inch pipelines with two 8-inch drainage discharge pipelines through the levee authorized under Permit No. 16972, 1999 - Joseph I. and Gayle Muller, TR). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 10/31/2013



LS view: pump on steel platform over drainage ditch.

LM Start	3.22	Rating **	A/W	issue ino.		62		
LM End	3.22	Issue Type +	Ma	Location *		LS		
Category	Earthen L	GPS Latitude/Longitude						
Calegory				Start		End		
Item	Trim / Thin Trees			37.81898	35°	37.818985	0	
item				-121.3596	75 °	-121.359675	0	
DWR ID DWR_RD0544_02_s _ 2015_62								
Comment Code								

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	
CD . Crause	

* Location

A : Acceptable : Minimally Acceptable

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.25	Rating **	U	Issue No.		78
LM End	3.25	Issue Type +	En	Location *		WS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Encroachments				7°	37.819347°
пеш	-121.360103 ° -121.36010					
DWR ID DWR_RD0544_02_s _ 2017_78						
Comment Code						

RW: Retaining Wall

Inspector Comment

Waterside slope retaining wall at pump location has slipped.

Photo 1 of 1: SP_2018_RD0544_109_78_20180323_00063.jpg



Looking east at sloughing of earthen pad on waterward shoulder and slope.

LM Start	3.25	Rating **	A/W	Issue No.		93	
LM End	3.34	Issue Type +	Ma	Location *			
Category	Suppleme		GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		37.819300 ° 37.819800 °			
iteiii				-121.3602	00°	-121.361600 °	
DWR ID DWR_RD0544_02_f _ 2017_93							
Comment Code							

Inspector Comment Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:545

Site Designation:LMA-451 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.25	Issue No.		93 (cont)		
LM End	3.34	Issue Type +	Ma	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory			Start		End	
Item	2017 Storm Damage			37.8193	00°	37.819800 °
пеш				-121.3602	00°	-121.361600 °
DWR ID DWR_RD0544_02_f _ 2017_93						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:545

Site Designation:LMA-451

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

LM Start	3.25	Rating **	A/W	Issue No.	93 (cont)
LM End	3.34	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_SP_2018_545_4774.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.29	Rating **	М	Issue No.		54	
LM End	3.29	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Vegetatio	Vegetation			35 °	37.819635 °	
item	item				19°	-121.360619 °	
DWR ID DWR_RD0544_02_f _ 2014_54							
Comment Code							
V4 : Elderherries are blocking visibility and flood fight capability							

V4 : Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Rating ** A/W Issue No. LM Start 3.48 36 3.51 Issue Type + Location * LS LM End Earthen Levee GPS Latitude/Longitude Category Vegetation 37.819576° 37.819530° Item -121.364056 ° -121.364653 DWR ID DWR RD0544 02 s 2012 36

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Cactus on landside slope.

LM Start	3.48	Rating **	A/W	Issue No.	36 (cont)
LM End	3.51	Issue Type +	Ma	Location *	LS

No Photos



Looking northwest at cactus on landward slope and toe fall 2015

Photo 2 of 3: SP_2018_RD0544_109_36_20180323_00031.jpg



Looking north at cactus on landside slope and toe spring 2015

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.48	Rating **	A/W	Issue No.		36 (cont)			
LM End	3.51	Issue Type +	Ma	Location *	LS				
Category	Earthen L	GPS Latitude/Longitud							
Calegory				Start		End			
Item	Vegetatio	n		37.81957	'6 °	37.819530°			
пеш	-121.364056 ° -121.36465								
DWR ID DWR_RD0544_02_s _ 2012_36									
	0 10 1								

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Cactus on landside slope.



Loooking southwest at overgrown cactus on landside slope spring 2015.

LM Start	3.49	Rating **	A/W	Issue No.		55		
LM End	3.52	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.8195	63 °	37.819542°		
item				-121.3643	07°	-121.364908°		
DWR ID	DWR_RD0544_02_f _ 2014_55							

Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment



Looking southwest at untrimmed trees on landward slope and toe fall 2015.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.51	Rating **	A/W	Issue No.	94				
LM End	3.55	Issue Type +	Ma	Location *					
Category	Supplemental					le/Longitude			
Calegory	Category					End			
Item	2017 Stor	m Damage		37.81950	00°	37.819400 °			
пеш				-121.36470	00°	-121.365400 °			
DWR ID	DWR ID DWR_RD0544_02_f _ 2017_94								
	Comment Code								

Inspector Comment Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:544

Site Designation:LMA-450

Repair Type: Erosion Rating:Area of Concern

Field Date:8/18/2017

LM Start	3.51	Rating **	A/W	Issue No.	94 (cont)
LM End	3.55	Issue Type +	Ma	Location *	

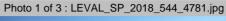




Photo 2 of 3: LEVAL_SP_2018_544_4782.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.51	Rating **	A/W	Issue No.		94 (cont)		
LM End	3.55	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory		Start		End				
Item	2017 Stor	m Damage		37.81950	00°	37.819400°		
пеш				-121.36470	00°	-121.365400 °		
DWR ID DWR_RD0544_02_f _ 2017_94								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:544

Site Designation:LMA-450

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

Notes:



LM Start	3.57	Rating **	М	Issue No.		19		
LM End	3.57	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS La	titud	le/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.81940	00°	37.819400°		
пеш				-121.36576	62°	-121.365762 °		
DWR ID DWR_RD0544_02_f _ 2013_19								
Comment Code								

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.57	Rating **	A/W	Issue No.		95		
LM End	3.58	Issue Type +	Ma	Location *				
Category	Suppleme		GPS La	atitud	le/Longitude			
Calegory				Start		End		
Item	2017 Stor	m Damage		37.8194	00°	37.819400 °		
пеш				-121.3658	00°	-121.365900 °		
DWR ID	DWR_RD0544_02_f _ 2017_95							

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:543

Site Designation:LMA-449 Repair Type: Erosion

Rating:Area of Concern Field Date:8/18/2017

LM Start	3.57	Rating **	A/W	Issue No.	95 (cont)
LM End	3.58	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_SP_2018_543_4797.jpg



Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.57	Rating **	A/W	Issue No.		95 (cont)		
LM End	3.58	Issue Type + Ma		3.58 Issue Type + N		sue Type + Ma Location *		
Category Supplemental			GPS Latitude/Longitude					
				Start		End		
Item	2017 Stor	m Damage		37.81940	00°	37.819400 °		
пеш					00°	-121.365900 °		
DWR ID	DWR_RD0	544_02_f _ 201	7_95					
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:543

Site Designation:LMA-449

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/18/2017

Notes:



LM Start	3.58	Rating **	М	Issue No.		67			
LM End	3.58	Issue Type +	Ma	Location *		Ma Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude						
Calegory		Start		End					
Item	Animal Control			37.81941	9°	37.819419	0		
item			-121.36585	4 °	-121.365854	۰			
DWR ID	DWR_RD0	544_02_f _ 201	5_67						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Large rodent holes on landward slope.

Photo 1 of 2 : SP_2018_RD0544_109_67_20180323_00051.jpg



Looking northeast at typical view of rodent holes on landward slope.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.58	Rating **	М	Issue No.		67 (cont)				
LM End	3.58	Issue Type +	Ma	Location *		Location *		Location *		LS
Catagonia Earthen Levee			GPS Latitude/Longitude							
Category	Category			Start		End				
Item	Animal Co	Animal Control			19°	37.819419°				
item				-121.365854 °		-121.365854°				
DWR ID	DWR_RD0	544_02_f _ 201	5_67							
		Comn	nent Coo	le						
A3 : No roo compact o	le, but rodent rows.	burrows	visible; nee	ed to	backfill and					
Inspector Comment										
Large rode	Large rodent holes on landward slope.									

Photo 2 of 2 : SP_2018_RD0544_109_67_20180323_00052.jpg

Looking north at typical view of rodent holes on landward slope.

Rating ** A/W Issue No. LM Start 3.60 96 3.61 Issue Type + Ob Location * LM End Supplemental GPS Latitude/Longitude Category 2017 Storm Damage 37.819590° 37.819600° Item -121.366320° -121.366390 ° DWR ID DWR RD0544 02 f 2017 96

Comment Code

Inspector Comment

Levee Evaluation Comments Description:

Site ID No:92

Site Designation:334-111 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.96	Rating **	U	Issue No.		112	
LM End	3.96	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.82170	0 °	37.821700 °	
пеш				-121.37175	2 °	-121.371752 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:51375 DS_ID:22674 EP_NO: 16357 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2015 Entire top part of pipe on WS corroded through and completely gone. Difficult to see WS due to heavy vegetation. Gully formed on WS slope in alignment with pipe and WS slope is saturated. (K. Fazel - UCIP)06/25/2015 Pipe completely rusted thru on WS slope and has potential to cause great erosion. Pit and holes on pipe and levee. No vent pipe found on WS. No concrete vent pipe found at the LS toe. (K. Fazel - UCIP)

FIELD_STRUCT_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on a concrete sump at the landside (LS) toe. Power pole with transformer at the LS toe. Backflow prevention valve at the LS toe, next to the pump. Pipe is open on the waterside (WS) end. (Plans to place 7 feet of fill on the LS of the crown, to remove existing pump and pipe, to install two slant pumps with 10-inch intake pipes and a 14-inch pipe through the levee, and to place riprap on the WS levee slope authorized under Permit No. 16357, 1995 - Pacific Agrilands, Inc). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced, 8 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.03), 12-inch pipe referenced, 8 feet below the crown].

FS Date: 12/22/2016

LM Start	3.96	Rating **	U	Issue No.	112 (cont)
LM End	3.96	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_51375_43005.jpg



WS view: levee slope with pits and holes.

Photo 2 of 3: UCIP_SP_2018_51375_43004.jpg



WS view: close view of levee slope with pits and holes.

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	3.96	Rating **	U	Issue No.		112 (cont)
LM End	3.96	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	DWR UCIP Field Study			0°	37.821700°
пеш				-121.37175	2 °	-121.371752°
DWR ID						

Comment Code

Inspector Comment

FS_ID:51375 DS_ID:22674 EP_NO: 16357 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 12/22/2015 Entire top part of pipe on WS corroded through and completely gone. Difficult to see WS due to heavy vegetation. Gully formed on WS slope in alignment with pipe and WS slope is saturated. (K. Fazel - UCIP)06/25/2015 Pipe completely rusted thru on WS slope and has potential to cause great erosion. Pit and holes on pipe and levee. No vent pipe found on WS. No concrete vent pipe found at the LS toe. (K. Fazel - UCIP)

FIELD_STRUCT_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on a concrete sump at the landside (LS) toe. Power pole with transformer at the LS toe. Backflow prevention valve at the LS toe, next to the pump. Pipe is open on the waterside (WS) end. (Plans to place 7 feet of fill on the LS of the crown, to remove existing pump and pipe, to install two slant pumps with 10-inch intake pipes and a 14-inch pipe through the levee, and to place riprap on the WS levee slope authorized under Permit No. 16357, 1995 - Pacific Agrilands, Inc). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced, 8 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.03), 12-inch pipe referenced, 8 feet below the crown]. FS Date: 12/22/2016

Photo 3 of 3: UCIP_SP_2018_51375_43003.jpg



WS view: inside view of hole in deteriorated pipe.

LM Start	4.05	Rating **	U	Issue No.	64		
LM End	4.05	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	titud	le/Longitude		
Category				Start		End	
Item	Vegetatio	n		37.82162	20°	37.821620	0
пеш					33 °	-121.373283	0
DWR ID	DWR_RD0	544_02_s _ 201					
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	04/26/2018 04/26/2018	Richard Willoughby

LM Start	4.14	Rating **	A/W	Issue No.		97				
LM End	4.15	Issue Type +	Ob	Location *						
Category	Supplemental			GPS Latitude/Longitude						
				Start		End				
Item	2017 Storm Damage			37.822400 °		37.822600 °				
пеш			-121.374410 °		-121.374510 °					
DWR ID	DWR_RD0544_02_f _ 2017_97									
Comment Code										
	Inspector Comment									
Levee Eva	Levee Evaluation Comments									
Description:										
Site ID No:98										
Site Designation:334-103										
Repair Type: Seepage										
Rating:										
Field Date:										
Notes:										

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement